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Reevaluation of the Environmental Assessment/FONSI

RS 487-1(2)0
BN Overpass—Whitefish
Flathead County, Montana

(Control #0732)

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Submitted Pursuant to
23 CFR 771.129(c)

by the

U.S. Department of Transportation
Federal Highway Administration, Region 8

and the

State of Montana
Department of Transportation
Highways Division – Engineering

September 1992

PLEASE RETURN

REEVALUATION
of the
ENVIRONMENTAL ASSESSMENT/FINDING OF NO SIGNIFICANT IMPACT
for
B-N OVERPASS - WHITEFISH
RS 487-1(2)0
C# 0732

MONTANA DEPT. OF TRANSPORTATION
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CONSTRUCTION OF RAILROAD OVERPASS

IN

LINCOLN COUNTY

Attached is a supplement to the EA/FONSI approved on October 29, 1986. We have reevaluated the EA/FONSI and all other updates to the document which include Hazardous Waste, Wetlands, and Threatened and Endangered Species and have established that the environmental document remains valid.

Submitted pursuant to 771.129(c)
by the
U.S. Department of Transportation
Federal Highway Administration
and
Montana Department of Transportation

Submitted by: _____ Date: 9-11-92
Montana Department of Transportation
Environmental and Hazardous Waste Bureau

Approved: _____ Date: 10-15-92
Federal Highway Administration
Division Administrator

Reevaluation of
the Finding of No Significant Impact
for
B-N OVERPASS - WHITEFISH
RS 487-1(2)0
MDT# 0732

This document is a supplement to the Environmental Assessment/FONSI that was approved for the proposed project in October 1986. The following reevaluation will address three issues that require updating: Hazardous Waste, Wetlands, and Threatened and Endangered Species.

DESCRIPTION OF PROPOSED ACTION
Briefly reviewing the scope of work: the proposed action involves the construction of a new railroad overpass with new approaches to improve the alignment of FAS 487. The 395 feet long structure will include two 12-foot driving lanes, two 10-foot shoulders, and two 6-foot sidewalks.

SCOPE OF WORK CHANGES
The project was split into two parts: construction of the north and south approaches and construction of the overpass structure. This reevaluation will deal with the approaches and the effects to the environment from their construction.

I.HAZARDOUS WASTE

The environmental assessment did not mention any hazardous waste potential. There is a hazardous waste site along the project - the railroad yard beneath the proposed overpass. The approaches that are to be constructed are over soil that was contaminated by refueling operations.

Approximately 20 cubic yards of contaminated material will be excavated during the installation of the culvert extending from the old approach through the new south approach. Additionally, excavation for installation of a water treatment and collection and disposal system will require 67 CY excavation. The approaches will be built from clean fill material.

The soil, which was contaminated by diesel fuel, consists of clay, clayey silt, silty clay, and silt. A thin silt layer (0.5 - 1.0) is present at the 5 to 8 foot depth. Soil total petroleum hydrocarbons (TPH) concentrations range from less than 10 ppm to 23,450 ppm. Most of the higher TPH concentrations were restricted to the silt layer zone.

The zone of elevated TPH concentrations is within the range of water table fluctuation. Dissolved hydrocarbons were not detected below the silt layer and low water table surface and do not appear to be migrating downward into the underlying sediments.

The goals and objectives for remediation of contaminated materials resulting from construction are:

- to dispose of contaminated materials in an appropriate manner that is protective of human health and the environment;

- to ensure that overpass construction will not adversely impact the diesel product plume or BN's future site-wide clean up options;

- the remedial action must be cost effective, taking into consideration the total short-term and long-term costs, including the cost of operation and maintenance for the entire period of remediation;

- the remedial action should attain compliance with applicable Federal and State environmental regulations, standards and requirements.

The clean-up of the contaminated soil will reduce the potential for effecting human health and will not effect the natural environment within the project.

Three alternatives were studied as possible ways of dealing with the contaminated soil:

Alternative one - No Action

Alternative two - On-site disposal or land treatment

Alternative three - Removal, Off-site disposal at a commercial landfill.
Transport the soil to Great Falls for disposal at a licensed landfarm site operated by Oily Waste Processors, Inc.

For excavated soils with total petroleum hydrocarbons (TPH) of less than 100 ppm, on-site disposal is preferred. The TPH of the soil to be excavated for the culvert extension is about 100 ppm or less.

Alternative 2 was selected as the preferred alternative.

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http://archive.org/details/reevaluationofen14mont

When TPH exceeds 100 ppm, off-site would be a more cost effective option for the small soil volume under consideration.

Benzene is the only groundwater contaminate detected above the EPA Maximum Contaminate Level (MCL). The highest benzene concentration detected is 4 µg/l. The MCL for benzene is 1 µg/l.

Groundwater contaminated with diesel fuel will be forced up from the ground as the embankment settles. Wick drains placed under the embankment will collect the water and drain out toward the edge. A three-foot-thick sand blanket will be placed above the existing ground to provide a pathway for the water to drain from the wick beneath the fill outward. The water would then be collected by trench drains and carried to a collection sump for storage. Water will be pumped from the collection sump by a pump which would be inserted through an access pipe into the sump. A pump shed will be used for housing piping and monitoring equipment used in pumping and discharging water from the collection sump. Water pumped from the collection sump will be ultimately disposed via a discharge pipe between the pump shed and the City of Whitefish sanitary sewer.

An oil water separator was not included in the plans for various reasons:

* Groundwater samples from monitoring wells showed low concentrations of diesel contaminates.

* The City Engineer of Whitefish has approved direct discharge of the untreated water, provided it meets pretreatment guidelines established by the Montana Water Quality Bureau.

II.WETLANDS

There will be no significant impacts to wetlands as a result of this project. A small wetland, 0.015 acres (600 sq.ft.), on the east side of the south approach will be filled. Loss of the wetland will be unavoidable. Proposed mitigation will consist of entering the amount on the Wetland Ledger for future off-site mitigation since no opportunities exist for on-site mitigation.

A Wetlands Finding has been prepared and is included in the appendix.

III.THREATENED AND ENDANGERED SPECIES

This project was determined to have "no-effect" on threatened and endangered species. The only potentially effected species are the bald eagle and peregrine falcon. No bald eagle nest territories are known to occur in the area. Therefore, no significant impacts to nesting eagles are anticipated from the project. All relocated powerlines will be raptor-proofed. In the project area these species are only seasonal migrants with the possibility of some wintering bald eagle activity.

Twenty miles to the south in the Flathead River area there is considerable bald eagle nesting and foraging activities. Birds in that area will not be impacted by this project.

The possibility of some bald eagle foraging activity does exist in the project area. However, due to the close proximity to Whitefish, birds foraging in the area would exhibit a relatively high disturbance tolerance behavior.

MONTANA DEPARTMENT OF TRANSPORTATION
Biological Resources Memorandum

MASTER FI
COPY

To: Gordon J. Stockstad, Supervisor
Resources and Permitting Section
Environmental and Hazardous Waste Bureau

From: JB Jeff Berglund, Fish and Wildlife Biologist
Environmental and Hazardous Waste Bureau

Date: August 26, 1992

Subject: RS 487-1(2)0
BN Overpass - Whitefish
Control No. 0732

I surveyed the BN Overpass project area for wildlife, wetlands, and additional biological resources on August 3, 1992. The project occurs entirely within the confines of an urban residential and industrial area which provides little natural vegetation and poor wildlife habitat. Construction of the project would result in the loss of a small (approximately 600 square feet) wetland; however, no additional significant impacts to biological resources are anticipated. Consequently, this memorandum has been prepared in lieu of a full Biological Resources Report. The wetland that would be affected by the project is discussed below under Wetlands.

Project Description

The project entails the replacement of the Burlington Northern Railroad overpass structure in Whitefish. The structure is located on Federal Aid Secondary Route 487 just north of the intersection of U.S. Highway 93 and FAS 487 (Figure 1).

The scope of work for this project includes the construction of a new bridge and approaches. The new structure will be approximately 395 feet long and will include two 12-feet driving lanes, two 10-foot shoulders, and two 6-foot sidewalks. In addition, approach alignment changes are proposed along East and West Edgewood Place and Wisconsin Avenue.

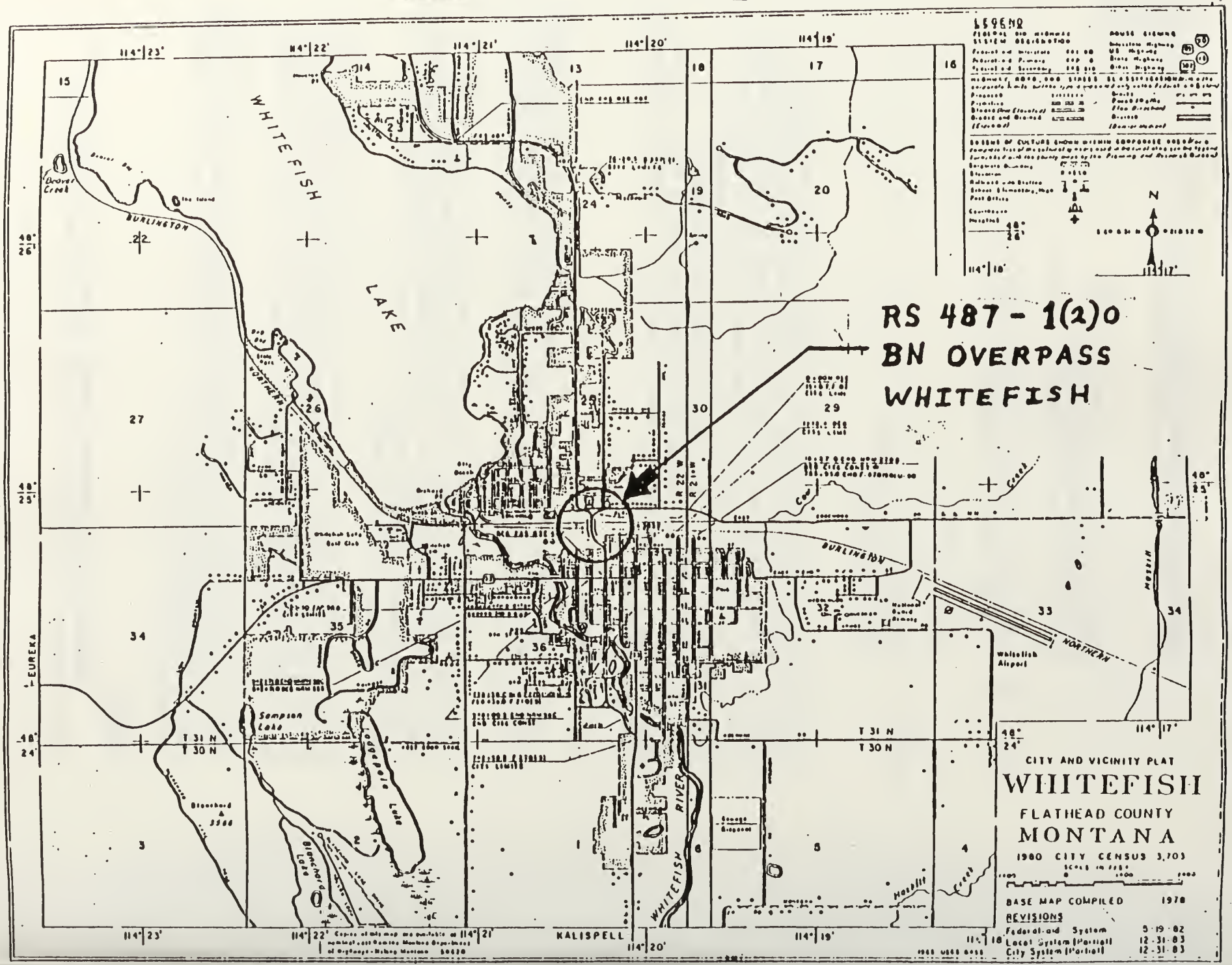
The project has been split into two separate projects for contract letting. Under the first contract, the north and south approach fills will be constructed and a 24-inch drain pipe extended 120 feet to its new inlet on the east side of the south approach fill. Wick drains will be installed to dewater the underlying weak soils.

Under the second phase, the structure will be constructed and the approach fills will be surfaced. Connections will be made to the existing streets and the existing structure and approaches will be removed. Curb and gutter installation, striping, and signing will also be performed.

Analysis

Threatened and Endangered Species. Threatened or endangered species which may occur in the general area are the bald eagle (endangered) and

Figure 1 - Project Location



peregrine falcon (endangered).

Bald Eagle. No bald eagles are known to nest in the project vicinity; the nearest known territory occurs several miles northwest of the project along the north end of Whitefish Lake (Flath pers. comm.;Montana Department of Fish, Wildlife & Parks 1991). Bald eagles may occur in the general project vicinity as seasonal migrants or winter residents. However, no suitable perching, foraging, or roosting habitat was observed in the immediate project area. As the project is 0.5 miles from potential eagle habitat at Whitefish Lake and 0.25 miles from similar habitat along the Whitefish River, no significant impacts to migrants and winter residents are anticipated.

The following mitigation/coordination measure should be implemented to ensure that project-related impacts to the bald eagle are minimized:

0 The location of construction-related activities, such as staging, batch plant, and borrow/gravel source activities, proposed within 0.8 kilometers (0.5 mile) of the Whitefish River or Whitefish Lake must receive prior clearance from an MDT biologist.

Peregrine Falcon. No potential peregrine falcon nesting habitat, such as cliff ledges, occurs within several miles of the project. The peregrine could occur in the general area during spring and fall migrations; most likely at Whitefish Lake or along the Whitefish River, where waterfowl are likely to concentrate during these seasons. Because the peregrine is only expected to occur in the general vicinity during seasonal migrations, and quality foraging habitat does not occur in the immediate project area, construction of the project is not expected to affect this species.

Determination of Effects. The proposed project is <u>not likely to adversely affect</u> the bald eagle and would have <u>no effect</u> on the peregrine falcon.

Wetlands. The wetland delineation was conducted in accordance with The Corps of Engineers (COE) Wetlands Delineation Manual (COE 1987) and the Interagency Memorandum of Understanding: Management and Mitigation of Highway Construction Impacts to Wetlands in the State of Montana. The indicator status of vegetation was derived from the National List of Plant Species that Occur in Wetlands: Northwest (Region 9) (Reed 1988).

One palustrine shrub-scrub/palustrine emergent wetland (Cowardin et al. 1979) was identified during the survey (Figure 2). The approximate 600 square foot wetland, dominated by cattail, red-osier dogwood, and willow, occurs just north of the Baker Avenue/Railway Street intersection. Vegetation surrounding the wetland has been heavily disturbed and is dominated by Canada thistle, toadflax, rose, knapweed, and snowberry. Due to its small size, lack of open water, and proximity to human disturbance, the wetland provides extremely limited wildlife habitat and virtually no habitat for fish. The MDT/MDFWP Wetland Site Evaluation form, a summary of the form (Table 1), and data plot forms for the wetland are included as attachments to this memorandum.

Due to design considerations (a design alternatives analysis was completed for the project) and the wetland location (Figure 2), impacts to the wetland are unavoidable; construction of the project would result in the complete draining and filling of this 0.015-acre wetland. Free-spanning the wetland would not be a

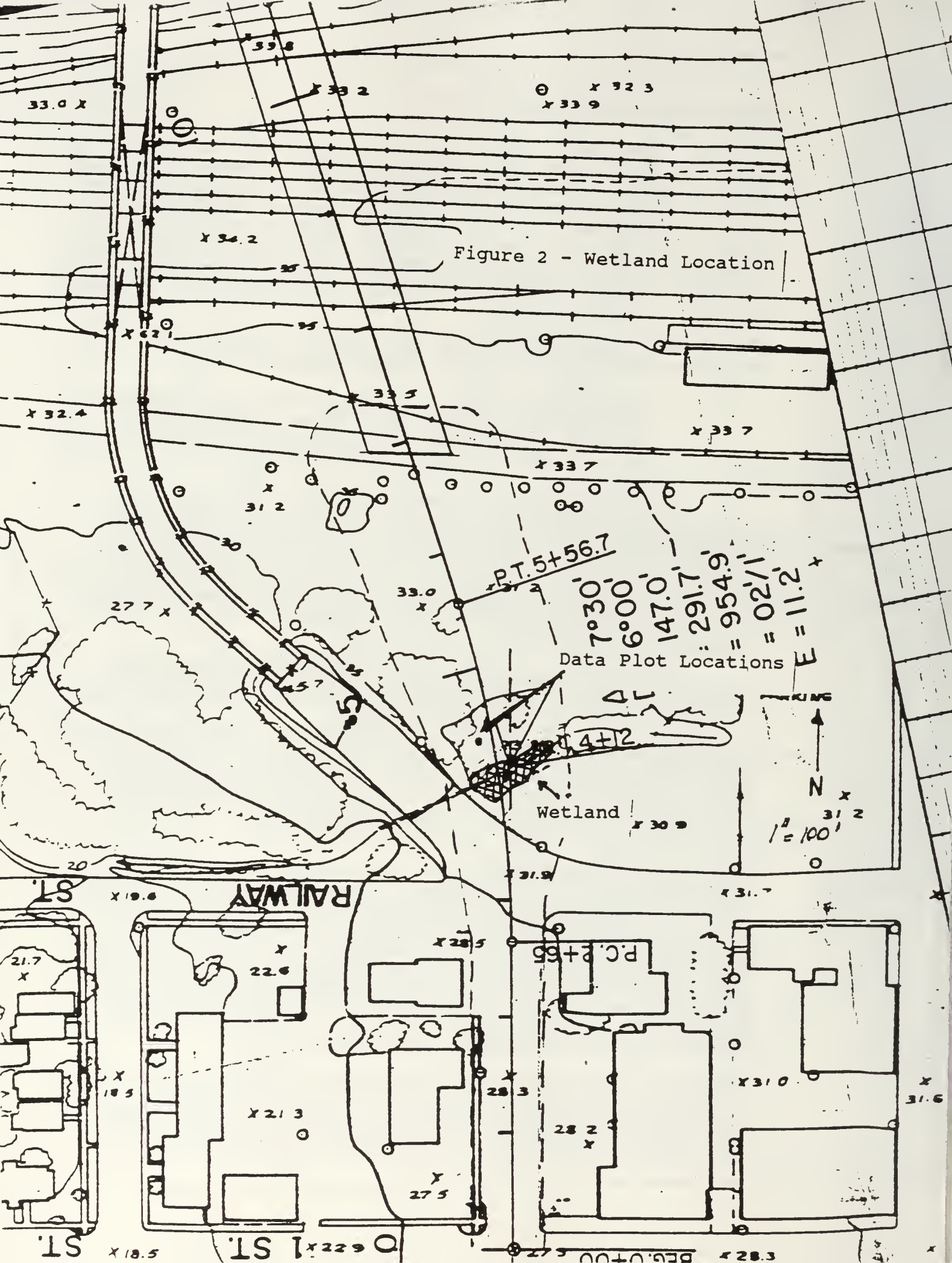


Figure 2 - Wetland Location
P.T. 5+56.7
7°30'
6°00'
147.0'
291.7'
954.9'
02'11"
11.2'
E
Data Plot Locations
4+12
Wetland
N
1" = 100'
RAILWAY
P.C. 2+65
33.0
31.2
30.9
31.7
31.9
28.5
28.3
28.2
31.0
31.6
27.5
22.9
21.3
18.5
19.6
21.7
22.6
27.7
36.2
33.2
32.3
33.9
32.4
33.5
33.7

practicable alternative due to exorbitant costs and the increased impacts of further modified (raised) bridge approaches on local businesses. As the "no build" alternative would fail to meet the needs of the local traveling public, and no practicable alternatives exist, the impact to the wetland would occur in compliance with Executive Order 11990.

Portions of the Burlington Northern railyard are contaminated with diesel fuel. Consequently, any new wetland created in the yard may be susceptible to contamination. Due to the relatively low value of the affected wetland, and the likelihood that a compensatory wetland constructed on the same site would provide similar or possibly lower-quality functions and values, it is recommended that mitigation for the lost wetland be conducted offsite. The 0.015 acres of filled wetland will be recorded as a wetland loss in the MDT wetland ledger and mitigated at a later date.

Additional Biological Resources. The project is proposed through a primarily urban corridor, and would result in disturbance to paved surfaces, local residences, and 2-3 acres of primarily ruderal and shrub vegetation. Aside from the previously discussed wetland, no significant biological resources, such as habitat for rare or sensitive plants or wildlife, were observed during the survey, and no significant effects to such resources are anticipated.

References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. Laroe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S.D.I. Fish and Wildlife Service. Washington, D.C. 35p.

Flath, D. Nongame Biologist. Montana Department of Fish, Wildlife & Parks, Bozeman, Montana. August 26, 1992 telephone conversation.

Montana Department of Fish, Wildlife & Parks. 1991. Locations of bald eagle nesting territories of record - August 1, 1991. Unpublished data. Helena, Montana.

Reed, P.B. 1988. National list of plant species that occur in wetlands: Northwest (Region 9). U.S.D.I. Fish and Wildlife Service. Washington, D.C. 89p.

U.S. Army Corps of Engineers. 1987. Corps of Engineers wetlands delineation manual. Technical report Y-87-1. Vicksburg, Mississippi. 100p.

JWB:env

cc: Gordon Larson, P.E., Asst. Administrator, Engineering-Highways
Edrie Vinson, Chief, Environmental and Hazardous Waste Bureau
Jim Weaver, P.E, District Engineer - Missoula
David Johnson. P.E., Preconstruction Engineer
John Maykuth, P.E., Construction Engineering
Barry Brosten, Environmental and Hazardous Waste Bureau
Jeff Berglund, Environmental and Hazardous Waste Bureau
Environmental and Hazardous Waste Bureau Project File

TABLE 1

Summary of Wetland Functional Rankings for BN Overpass Whitefish Wetland

Parameter	Site Functional Ranking
Relative Occurrence	rare
Habitat Interspersion	2
Cover: Water Ratio	N/A
Inundation Frequency	1
Sediment Control	2
Nutrient Retention	A
Food Chain Production	3
Wildlife Habitat Value	
Waterfowl	1
Upland Game Birds	1
Song Birds	2
Raptors/Owls	1
Furbearers	1
Small Mammals	2
Ungulates (Deer)	1
Large Predators	0
Threatened or Endangered Species	0
Fisheries Habitat Value	
Montana Fishes of Special Concern	0
Trout	0
Other Salmonids	0
Non-Salmonid Game Fish	0
Rough or Non-Game Fish	0
Overall Site Ranking	9/24

JB:Q:ENV:49.dlw

MDT/MDFWP
WETLAND SITE EVALUATION

Date 8/3/92

Project No. RS 487-1(2) Control No. 0732

Project Name Whitefish - BN RROP - Approaches

County Flathead Drainage Whitefish River
R. 22W, T. 31N, Section 36

Site Location Station (on plan sheet) Approximately Station 3+50.00 (right)

Comments (route, milepost, etc.) Immediately north of Baker Avenue/Railway Street Intersection

1. Classification (from Novitski, 1979)

Hydrologic Type(s) II, A/B, 70/30
Area Approximately 600 sq. ft. (100%)

Vegetative Type(s) (1) Herbaceous
Dominant Species
(a) Typha latifolia (cattail)
(b)
(c)
(2) Shrub
(a) Salix spp. (willow)
(b) Cornus stolonifera (red-osler dogwood
(c) Amelanchier alnifolia (serviceberry)
(3)
(a)
(b)
(c)

2. Adjacent Supporting Habitats (Descriptive Summary)
Wetlands (type, vegetation, area, location, condition, wildlife values)
Wetland is situated in a small drainage pocket of the BN railyard and is surrounded by ruderal/weedy vegetation such as rose, toadflax, thistle, knapweed, mullon, and quackgrass. Occasional willows occur in a segmented continuance of the drainage to the northeast; however, no additional wetlands were observed. The general surrounding vegetative communities have been greatly disturbed.

Uplands (vegetation type, area, location, condition, land use, erosion potential, wildlife values)
Wetland is surrounded by ruderal/weedy species including quackgrass, knapweed, thistle, mullom, toadflax, and rose, wildlife value is very low due to "urban" nature of site and high levels of human activity.

3. Relative Commonness of Wetland Type in Area rare
(1) abundant (2) common (3) rare

4. Degree of Habitat Interspersion
Low = 1 Moderate = 2 High = 3

5. Vegetative Cover Characteristics of Flooded Wetlands.
(not applicable to non-flooded wetlands)

		Rating
a.	Cover occupies more than 95% of wetland	0.5
b.	Cover occupies 76-95% of wetland in a peripheral band	1.5
c.	Cover occupies 76-95% of wetland with scattered open water areas	2.5
d.	Cover occupies 26-75% of wetland occurring in dense patches or diffuse open stands	3.0
e.	Cover occupies 26-75% of wetland in a peripheral band	2.0
f.	Cover occupies 5-25% of wetland occurring in a peripheral band or diffuse open stands	1.0
g.	Cover occupies less than 5% of the wetland	0.5

6. Inundation Frequency

		Rating
a.	Temporary surface water or saturated soil	1
b.	Seasonally or intermittently flooded	2
c.	Semi-permanent or permanently flooded	3

7. Sediment Control/Load Rating Criteria

		Rating
a.	Wetland does not receive detectable amounts of sediment - the watercourse is relatively sediment-free and accumulations are not evident	1

b. Wetland receives some sediment load but not enough to impact the plants or aquatic organisms using the site. The watercourse has sediment accumulations, but the water is not normally turbid 2

c. Wetland receives heavy sediment loads that has impacted the plant/animal growth/use of the site. The watercourse has large accumulations of sediment and the water is usually turbid 3

8. Water Flow Rating Criteria

a. Most of the water flows through the wetland in distinct channels or watercourses or has little flow of surface water during the year 1

b. Channels of watercourses present, but a significant portion of water is sheet flow through the wetland 2

c. Water flows across wetland uniformly and is not contained in channels or watercourses 3

9. Nutrient Retention Capabilities (circle one ranking)

a. Non-contiguous wetland with little accumulation of organic matter 1

b. Non-contiguous wetland with organic material accumulation 2

c. Contiguous wetland with little accumulation of organic matter 2.5

d. Contiguous wetland with organic material accumulation 3

10. Relative Flood Storage Potential

a. Section 8, line a; Section 6, line a 1

b. Section 8, line b; Section 6, line b 2

c. Section 8, line c; Section 6, line c 3

11. Relative Food Chain Support Potential (Based on percent vegetative cover and estimated relative standing crop).

a. Low (vegetative cover less than 5%; non-contiguous; no accumulation of organic matter) 1

b. Moderate (vegetative cover 6-25%; contiguous or non-contiguous to other supporting habitats; some accumulation of organic material) 2

c. High (vegetative cover 26-100%; contiguous to other supporting habitats, some accumulation of organic material) 3

12. Wildlife Habitat Values (Overall) Rating (0-3)
(Based on cover, diversity, supporting habitats, and productivity)

Evaluation Group or Species

a.	Waterfowl	1
b.	Upland Game Birds	1
c.	Songbirds	2
d.	Raptors and Others	1
e.	Furbearers	1
f.	Non-furbearing small mammals	2
g.	Large Ungulates (elk, moose, deer)	1
h.	Large Carnivores (bear, cat)	0
i.	Threatened or Endangered Species	0

Evaluate utilization by waterfowl/wildlife of wetland site for nesting, rearing young, feeding or protective cover based upon the following criteria (high, medium, low).

Use by wildlife group is <u>significant</u> in that loss or reduction by the wildlife use would have an adverse effect on the population of the species or wildlife in the general area (township) 3

Use by wildlife group is <u>evident</u> or probably and loss or reduction of the wildlife use may have an adverse effect on the local wildlife population (surrounding section[s]) 2

Use by wildlife group is <u>low</u> or incidental in that loss or reduction of the wildlife use would have a negligible effect on the local wildlife population . 1

Use by wildlife group is non-existent

at any time during any year. NOTE: Use .3 to signify occasional use 0

13. Estimate utilization by fish for spawning, nursery, feeding, or cover.

a.	Montana fishes of special concern	0
b.	Trout "brookies"	0
c.	Other Salmonids	0
d.	Non-Salmonid Game Fish (pike, bass, walleyes)	0
e.	Non-Game or Rough Fish	0

Use by fish is <u>significant</u> in that loss or reduction of the fish use would have an adverse effect on the population of the fish in adjacent waters 3

Use by fish is <u>evident</u> or probably and loss or reduction of the fish use may have an adverse effect on the population of fish in the immediate vicinity but the magnitude of the reduction would be insignificant in relation to the total population of fish in adjacent waters 2

Use by fish is <u>low</u> or incidental in that loss or reduction of the fish use would have negligible effect on the population of fish in the immediate vicinity 1

Use by fish never present at any time in the year 0

14. Recreational Use Potential ..... 1 / 2 / 3

15. Summary of Functional Values and Overall Site Ranking

Sediment control rating	2/3
Nutrient retention rating	1/3
Relative flood storage rating	1/3
Relative food chain support	3/3
Wildlife Habitat Values	
Highest (Evaluation Group <u>c,f</u>)	2/3
Lowest (Evaluation Group <u>h,i</u>)	0/3
Fisheries Habitat Values	
Highest (Evaluation Group <u>all</u>)	0/3
Lowest (Evaluation Group all)	0/3

9/24

JWB:Q:ENV:48.dlw

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Whitefish - BN RROP (Control # 0732) Date: 8/3/92
Applicant/Owner: Burlington Northern County: Flathead
Investigator: S. Berglund State: Montana

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: WL-1 (Wet)

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Typha latifolia	H	OBL
2. Cornus stolonifera	S	FACW
3. AMelanchier alnifolia	S	FACU
4. Salix sp.	S/Sap	FACW→OBL
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
✓ No Recorded Data Available

Field Observations:

Depth of Surface Water: Ø (in.)
Depth to Free Water in Pit: Unknown (in.)
Depth to Saturated Soil: Ø (Surface) (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
X Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
X Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks:

SOILS

Map Unit Name
(Series and Phase): Unknown

Drainage Class: Unknown

Taxonomy (Subgroup): Unknown

Field Observations
Confirm Mapped Type? Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- X Aquic Moisture Regime (assumed)
- ___ Reducing Conditions
- X Gleyed or Low-Chroma Colors (assumed)
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- X Other (Explain in Remarks)

Remarks: Munsell not available during survey; however, soil appeared very dark (near chroma of 1), and was saturated to the surface during a very dry period. The site was also vastly dominated by Typha latifolia, an obligate wetland species.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) No (Circle)
Wetland Hydrology Present? (Yes) No
Hydric Soils Present? (assumed) (Yes) No

Is this Sampling Point Within a Wetland? (Yes) No (Circle)

Remarks: See remarks under "Soils".

Approved by HQUSACE 3/92

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project/Site: Whitefish - BN RROP (Control # 0732) Date: 8/3/92
Applicant/Owner: Burlington Northern County: Flathead
Investigator: J. Berglund State: Montana

Do Normal Circumstances exist on the site? (Yes) No
Is the site significantly disturbed (Atypical Situation)? Yes (No)
Is the area a potential Problem Area? Yes (No)
(If needed, explain on reverse.)

Community ID:
Transect ID:
Plot ID: WL-1 (dry)

VEGETATION

Dominant Plant Species	Stratum	Indicator
1. Cirsium arvense	H	FACU+
2. Rosa sp.	H/S	FACU
3. Symphoricarpos alba	S	FACU
4. Linaria vulgaris	H	UPL
5. Centaurea sp.	H	Not Rated (not on List)
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 0%

Remarks:

HYDROLOGY

___ Recorded Data (Describe in Remarks):
___ Stream, Lake, or Tide Gauge
___ Aerial Photographs
___ Other
✓ No Recorded Data Available

Field Observations:
Depth of Surface Water: 0 (in.)
Depth to Free Water in Pit: Unknown (in.)
Depth to Saturated Soil: Unknown (in.)

Wetland Hydrology Indicators:
Primary Indicators:
___ Inundated
___ Saturated in Upper 12 Inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
___ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 Inches
___ Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

Remarks: No indicators of hydrology present. Soil surface dry. No depressions or drainage patterns evident.

SOILS

Map Unit Name (Series and Phase): Unknown

Drainage Class: Unknown

Taxonomy (Subgroup): Unknown

Field Observations
Confirm Mapped Type? Yes No

Profile Descnotion:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- ___ Gleyed or Low-Chroma Colors
- ___ Concretions
- ___ High Organic Content in Surface Layer in Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (Explain in Remarks)

Remarks: No indicators of hydric soil observed; Munsell not available at time of survey.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes (No) (Circle)
Wetland Hydrology Present? (Assumed) Yes (No)
Hydric Soils Present? (Assumed) Yes (No)

(Circle)
Is this Sampling Point Within a Wetland? Yes (No)

Remarks: See remarks under "Hydrology" and "Soils".

STATE
SCK

DEPARTMENT OF HIGHWAYS

TED SCHWINDEN, GOVERNOR

2701 PROSPECT

STATE OF MONTANA

HELENA, MONTANA 59620

October 23, 1986

MONTANA DEPT. OF HIGHWAYS
RECEIVED
OCT 29 1986
HELENA, MONTANA

William S. Dunbar
Project Development Engineer
Federal Highway Administration
301 South Park, Drawer 10056
Helena, MT 59626

RS 487-1(2)0
BURLINGTON NORTHERN OVERPASS - WHITEFISH

We are hereby submitting a separate document for your signature incorporating the Environmental Assessment and related documentation. It is the Department of Highways' recommendation that a "Finding of No Significant Impact" be concurred in by your office.

Stephen C. Kologi

STEPHEN C. KOLOGI, P.E.
CHIEF - PRECONSTRUCTION BUREAU

Concur W S Dunbar
for Federal Highway Administration

Date 10/29/86

SCK:FWB:mb:4d

Attachment

cc: G. J. Wicks w/attach
D. M. Harriott "
J. R. Ricker "
S. C. Kologi "
K. F. Skoog "
V. D. Borden "
C. S. Peil "
N. H. Rognlie "
G. A. Jackson w/attach
G. L. Anders "
L. Brazda "
D. P. Bartsch "

FINDING OF NO SIGNIFICANT IMPACT

FOR

RS 487-1(2)0
B. N. OVERPASS - WHITEFISH

THE FEDERAL HIGHWAY ADMINISTRATION HAS DETERMINED THAT THIS PROJECT WILL NOT HAVE ANY SIGNIFICANT IMPACT ON THE HUMAN ENVIRONMENT. THIS FINDING OF NO SIGNIFICANT IMPACT IS BASED ON THE ATTACHED ENVIRONMENT ASSESSMENT AND INPUT FROM THE LOCATION AND DESIGN PUBLIC HEARING. THIS FINDING HAS BEEN INDEPENDENTLY EVALUATED BY THE FEDERAL HIGHWAY ADMINISTRATION AND DETERMINED TO ADEQUATELY AND ACCURATELY DISCUSS THE ENVIRONMENTAL ISSUES AND IMPACTS OF THE PROPOSED PROJECT AND PROVIDES SUFFICIENT EVIDENCE AND ANALYSIS FOR DETERMINING THAT AN ENVIRONMENTAL IMPACT STATEMENT IS NOT REQUIRED. THE FHWA TAKES FULL RESPONSIBILITY FOR THE ACCURACY, SCOPE AND CONTENT OF THE ATTACHED ENVIRONMENTAL ASSESSMENT.

W S Dunbar Date 10/29/82

W. S. Dunbar, Project Development Engineer
Federal Highway Administration

FWB:3:cm:242/R2

ENVIRONMENTAL ASSESSMENT

RS 487-1(2)0

BURLINGTON NORTHERN OVERPASS - WHITEFISH

FLATHEAD COUNTY

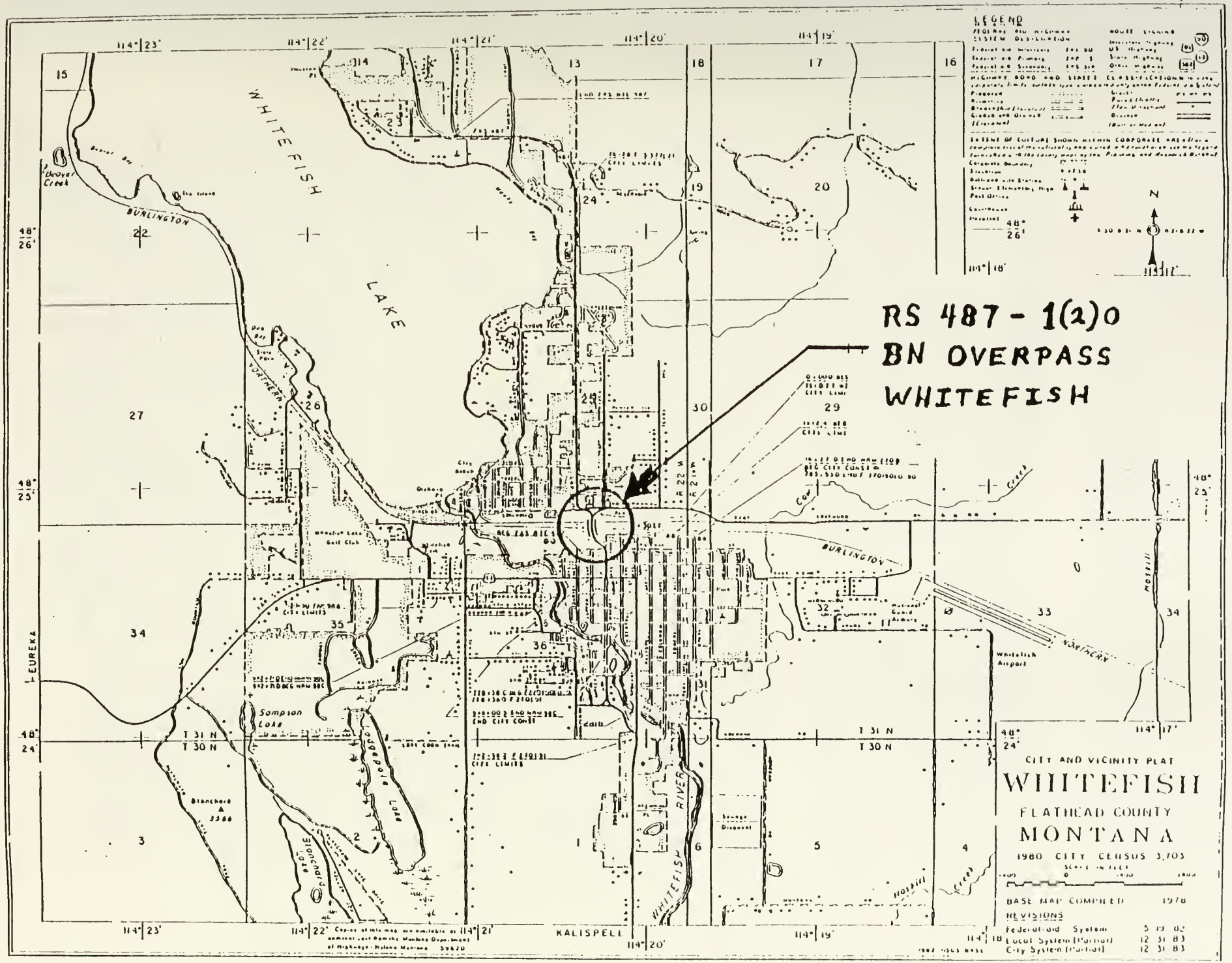
This document is prepared in conformance with MEPA requirements and contains the information required for a Preliminary Environmental Review. It is also prepared in conformance with NEPA requirements and contains the information required for an Environmental Assessment.

Submitted By: _____ Date June 25, 1986
Montana Department of Highways
Preconstruction Bureau

ROGER K. SCOTT
Division Administrator

Reviewed and Approved for Distribution: _____ Date 7-2-86
Federal Highway Administration
for Division Administrator

FWB:cm:5/xx


RS 487 - 1(2)0
BN OVERPASS
WHITEFISH
WHITEFISH LAKE
CITY AND VICINITY PLAT
WHITEFISH
FLATHEAD COUNTY
MONTANA
1980 CITY CENSUS 5,703
BASE MAP COMPILED 1978
REVISIONS
Federal-aid System 5 19 82
Local System (Portion) 12 31 83
City System (Portion) 12 31 83
KALISPELL
EUREKA
BURLINGTON
NORTHERN
Whitefish Airport
Sampson Lake
Blanchard
WHITEFISH RIVER
T 31 N
T 30 N

RS 487-1(2)0
B. N. Overpass - Whitefish
Environmental Assessment

I. Description of Proposed Action

This project involves the replacement of the Burlington Northern Railroad overpass structure in the community of Whitefish, in Flathead County. The structure is located on Federal Aid Secondary Route 487 just north of the intersection of FAP 5 (U.S. 93) and FAS 487 (see map on next page). This secondary roadway is classified as a major collector by the 1985 Rural Functional Classification of Highways. The existing overpass is a multi-span structure built in 1936 with improvements in 1973 and presently carries a 22-foot wide roadway. Of the twelve spans of the existing structure, two are concrete beams, two are steel girders, seven are treated timber beams and one is a steel truss. The spans vary in length from 14 feet to 177 feet.

The scope of work for this project will include the construction of a new bridge and approaches. The new structure will be approximately 395 feet long and will include two 12-foot driving lanes, two 10-foot shoulders and two 6-foot sidewalks separated from the shoulder by a concrete barrier rail. A vehicle and pedestrian rail with guard fence will be provided on the outside of the sidewalks to protect pedestrians. The structure and its approaches will have at least a 30 mph design speed. The new approaches will flatten the existing horizontal curves and will improve the alignment of FAS 487. The grades will be 7% on the southern approach and 6% on the northern approach. Autoscreen Print #1 (see attachments) shows the proposed alignment and approximate approaches.

Edgewood Place will be rebuilt as shown on the attached autoscreen prints to provide 25 mph design approaches to Wisconsin Avenue. Since traffic will stop at the Wisconsin Avenue intersection this is considered to be an appropriate design speed. The proposed alignment will allow an at-grade intersection, thereby reducing fill slopes and right-of-way requirements. A left-turn bay for northbound traffic is proposed for this intersection.

Traffic on Railway Street east of the proposed alignment will stop at the Baker Street intersection. Railway Street west of the intersection presently has a steep approach slope to Baker Avenue. Since the elevation of the intersection will be raised to allow reasonable grades to the bridge while maintaining the required railroad clearance, this approach slope will become even steeper. The traffic on Railway Street west of Baker Avenue is quite low, and several modifications of this street are presently under consideration to improve safety at the intersection. These include either closing the street to traffic, changing the street into a westbound one-way facility, or leaving only enough of the street to provide access to the Kentucky Fried Chicken building while closing the rest of the street. The decision on which alternative will be selected at this intersection will depend in part on information obtained from the Public Hearing.

The above described scope of work will allow adequate room for future flexibility. The new structure would be capable of accommodating a future four-lane roadway through removal of one sidewalk. The Wisconsin Avenue - Edgewood Place intersection could be signalized if future traffic counts warrant such action.

The existing overpass will be utilized as a detour during construction of the new structure. After completion, the existing overpass, its approaches and the existing pavement on Edgewood Place between Wisconsin and Colorado Avenues will be removed and the disturbed areas will be blended into the surroundings. Utilities now attached to the overpass, including a gas distribution line and a telephone line, will be perpetuated on the new structure as required.

II. Need for Prooosed Project

The community of Whitefish is divided into two parts by the Burlington Northern Railroad yard. The business district is south of the yard and a residential area is to the north. The existing bridge provides the only crossing within the city limits and therefore serves as the connecting link between the two halves of the community. Residents north of the railroad yard receive all emergency services via this structure.

The bridge also serves as the only reasonable access to Whitefish Lake and the Big Mountain Ski Resort. The ski resort is currently planning an expansion which is scheduled to be completed by 1991. This expansion includes doubling of commercial square footage, increasing hotel units from 127 to 1000 and tripling the capacity for lifts and day services. The resort is also planning on expanding summer use. There is also non-resort related expansion on the lower slopes of Big Mountain, where several subdivisions are currently being built on local roads accessing FAS 487. These expansions will result in steadily increasing traffic volumes both on FAS 487 and across the overpass structure in the near future.

Problems with the existing bridge stem from a combination of the narrow width, the steep grades, and the sharp horizontal curves. The 22-foot wide top surface is particularly restrictive for large recreational vehicles such as campers and motorhomes. A timed traffic study gave an average speed of 16 mph across the overpass. Only the slow movement of traffic, which the above parameters indicate, makes safe traffic possible.

The present structure also has a low sufficiency rating which compares the existing condition of the bridge to the latest design standards. Any bridge with a sufficiency rating of less than 50 can be considered for replacement. The latest rating for the Whitefish overpass (as of May, 1986) was 40.5 out of a possible 100 points.

The only existing alternative crossing is 1½ miles east of the structure where a county road crosses the railroad tracks. The crossing is at-grade and is frequently blocked by east-west railroad freight traffic.

The high existing and projected traffic volumes also indicate a need for an improved facility. Traffic analysis of the project area produced the following average daily traffic estimates:

	1984 ADT	2004 ADT
Wisconsin Avenue (North of Overpass)	4380	7900
Baker Avenue (South of Overpass)	5710	8450
Overpass Structure	9150	16000
Edgewood Place (West of Intersection)	2850	4650
Edgewood Place (East of Intersection)	1060	1200

The traffic volume crossing the structure includes 2.2% small trucks and 0.1% large trucks for a total truck percentage of 2.3%.

The highway accident analysis for this section of roadway was reviewed to identify accident clusters and correctable trends. During the period of January 1, 1979 to December 31, 1985 there were a total of 34 accidents between the FAP 5 junction and the Denver Avenue Intersection. In 19 of these accidents the overpass structure was the first object hit. Eleven of these were injury accidents and 18 injuries were recorded. There were no fatalities. The section's accident rate is 2.61 accidents per million vehicle miles. This compares the statewide average rate of 2.68 for secondary routes. The accident severity rate for this section is 1.322 which is lower than the statewide average of 1.52. Previous review of accident data identified this location as an accident cluster and a field review resulted in improved delineation under a safety project. Accident details did not vary significantly from statewide averages and no correctable trends were identified.

III. Alternates Considered

The proposed alignment connects Baker Avenue and Wisconsin Avenue as shown on Autoscreen Print #1. Several modifications of the Wisconsin Avenue - Edgewood Place connections were considered. The steep grades and high fills involved, the necessity of providing a proper curve radius for large trucks, and the desire to avoid any unnecessary residential impacts led to the proposed alignment being selected for the Edgewood connection. This project has an estimated total cost of $ 3,130,000.

Various location alternates have also been considered at one time or another for this project. Autoscreen Print #2 shows the approximate alignments and preliminary estimated construction limits of these other alternates. These alternates and their respective impacts are described below. Alternates E - G were studied in a 1977 feasibility study but were not considered acceptable. The other alternates received further study and the proposed alignment was considered to minimize the environmental impacts while providing a highway facility capable of accommodating the traffic volumes found on this highway. This alternate also maintains route continuity by retaining the existing streets on FAS 487 while flattening the horizontal curves.

A. West Alternate (Baker Avenue to Wisconsin Avenue)

The possibility of placing the new alignment on the west side of the existing bridge has received considerable study. This would connect

Baker and Wisconsin Avenue as in the proposed project, but the new structure would be located approximately 275 feet west of the existing overpass. The grades would be 7% on the southern approach and 7% on the northern approach. This alternate would have an total estimated cost of $3,320,000.

This alignment would result in minimal impact on the residential area. However, the amount of fill required and resulting new right-of-way would eliminate the access and parking areas for three well-established businesses including O'Piccolo's Pizza and Wilson's Chiropractic Clinic on the north end of the project and the Kentucky Fried Chicken to the south. This would effectively depreciate out all three businesses.

This alternate would place the Wisconsin Avenue - Edgewood Place intersection at its existing location. This would result in the connection being made on a 7.0% Wisconsin Avenue approach slope. This is not considered particularly desirable since it could result in traffic difficulties under icy conditions. Moving the intersection to the north to reduce the slope at the intersection would result in additional right-of-way requirements and impacts to the residential area north of Edgewood Place.

This alternate would also go directly over the switches for the railroad yard. Placing a bent at this location would interfere with the vision of the engineer during switching operations and is not acceptable from a railroad safety standpoint. Placing a clear span over the entire group of tracks would require 8% or steeper approach grades to obtain the required clearance above the railroad tracks. Such grades are not desirable due to the traffic problems under icy conditions. Flattening these grades would raise the elevation of the Edgewood intersection and/or move it northwards. Either way, the resulting fills and right-of-way requirements would impact the residential area to the north.

The above safety considerations alone make this an undesirable alternate.

B. Overpass - Lupfer Avenue to Wisconsin Avenue

Although this alignment would eliminate the sharp horizontal curvature of other alternates, two major obstacles were encountered. Since the Railway Street - Lupfer Avenue intersection is 10 feet lower than the present Railway Street - Baker Avenue intersection, the approach would have to begin in the area of First Street to maintain a 7% grade. This alternate would also result in the diversion of traffic flow from the main business district to a partially residential area.

In addition, this alignment would cross the railroad switches and have the same impacts as Alternate A on railroad switching operations. The Wisconsin Avenue - Edgewood Place intersection would have the same disadvantages as in Alternate A and would again eliminate the two businesses on Wisconsin Avenue. The cost of this alternate would be at least $ 3,130,000.

Again, safety considerations make this an undesirable alternate.

C. Underpass Alternate

Construction of an underpass is one way of reducing the 6% - 7% grades of all the overpass alternates. An underpass would require costly construction methods. First, the underpass structure would have to support the railway traffic for the 13 tracks crossing the underpass and would therefore require extremely difficult and costly subsurface support for the heavy and highly impactive loads. Additional problems include wet and poor subsurface conditions. The structure would require at least a gravity drain, while a pumping station and weighted slab may also be required. Continuous dewatering and shoring combined with interference with railway traffic would dramatically increase excavation and sub-excavation costs. The total estimated cost would vary from $ 6,510,000 to $ 6,920,000 depending on the final scope of work. In addition to construction costs, careful maintenance would be required to properly vent, drain and light an underpass structure. Snow removal would also be a problem since snow would have to be completely removed from the sloping approach areas, rather than just pushed aside.

D. "No Build" Alternate

The "No Build" alternate was considered but was eliminated as a viable alternative. The low sufficiency rating, narrow width and low traffic speed of the existing structure, compared to the importance of the overpass to the community of Whitefish and the increasing traffic volumes, make this choice unacceptable.

E. Overpass - Baker Avenue to Colorado Avenue

As in Alternate B, a straight approach would require some lengthening of the approach to the south and major lengthening of the Colorado Avenue approach. Due to elevation differences, Edgewood Place would require major alterations to even receive an intersection on a 7% slope as in Alternates A and B. This would take out at least the two houses at the Edgewood - Colorado intersection and would impact the new 16 unit apartment complex east of Colorado Avenue. (This was built since the aerial photograph was taken - marked on autoscreen print.) Moving the alignment to the west to avoid the apartments would directly impact the houses west of Colorado Avenue. In addition, Colorado Avenue is a narrower residential street currently carrying a very low traffic volume and is not a through street. This avenue would have to be rebuilt and widened to accommodate the increased traffic. A new connection would then have to be built from Colorado Avenue to FAS 487. This alternate would therefore require a high cost and would seriously conflict with the present residential use of the area north of Edgewood Place.

F. Overpass - Central Avenue to Colorado Avenue

This alignment has the same problems as Alternate C, in that extended approaches and major alterations to Edgewood Place would be required if a reasonable grade was to be maintained. In addition, Central Avenue has 45° angle parking. While this provides

considerable parking space, the traveled lanes are narrow and not conducive to good traffic flow. Providing reasonable access to an overpass would require eliminating angle parking and changing parking and traffic patterns in the major retail area. Again, this also would place heavy traffic on a residential street as in Alternate E, require rebuilding and widening of Colorado Avenue and a new FAS 487 connection and would result in similar impacts on the residential area.

G. "Reconstruct Existing Alignment" Alternate

Although the present alignment is quite well conceived, reconstructing the overpass along the existing centerline would require a lengthy period of no use. The short spans could be widened, but the truss span would have to be removed and replaced, thus requiring an extended (min. 6 months) detour period which would be unacceptable with the only detour route being the crossing far to the east. Building a temporary detour structure is not feasible since such a structure would need to span all 13 railroad tracts. The cost of such a detour structure would be prohibitive.

The major advantage of the existing alignment is that access to Edgewood Place is easily achieved without major grade changes, whereas most other alternatives require major changes.

Essentially, the detriments of the existing grade and curvature could be overcome if the structure and approaches were wider; however, the loss of the access during construction outweighs any advantages to be gained.

IV. Impacts

The project basically involves the upgrading and replacement of an existing facility to meet current and anticipated travel needs. The relationship between the local short-term uses of man's environment and maintenance and enhancement of long-term productivity has been considered. There will be some short-term uses of the environment during construction of the project, however, we expect them to be insignificant.

A. Social and Economic Impacts

Flathead County has experienced a 51.4% increase in population over the past 20 years. This increase is among the highest for all counties in the state. Current estimates by both the Flathead County Planning Office and the Bureau of Business and Economic Research indicate a continued increase in population for Flathead County as a whole. Those areas of recreational value located along FAS 487, such as the Big Mountain Ski Resort and the eastern shore of Flathead Lake, are expected to experience residential and resort development at a greater than average rate for the county. This will place increased traffic volumes on FAS 487. This increase is expected regardless of reconstruction of the overpass structure.

Since this project is basically an upgrading of an existing facility, it is not expected to have a significant impact on community growth or traffic patterns in Whitefish. The primary effect of the new construction will be to improve access to the area north of the BN Railroad yard. This may contribute to an increase in the existing trend toward increased growth in the recreational areas served by FAS 487.

The primary impact of this project on the community of Whitefish itself will consist of the relocation of several residences. The project will require the relocation of five residential buildings, of which one is a trailer and one building houses two families. All of these buildings are in Block 10, which is an older section of Whitefish. This area is a low to medium income white neighborhood. No minorities were observed in the immediate area and no minority groups will be adversely affected by this project.

The city and surrounding area has enough residential properties on the market that relocation should be able to be accomplished without undue delay. Relocation assistance will be provided in accordance with the State Relocation Assistance Program. Every attempt will be made to relocate people in similar properties in the same environment and nearby area. It is the policy of the Montana Department of Highways that no person shall be displaced by the construction of any federally aided highway project unless and until adequate replacement housing has been provided. All replacement housing offered will be fair housing, open to all persons regardless of race, color, religion, sex, or national origin.

This project will have little or no effect on the long-term employment situation in the area. A slight increase in employment will occur during construction which will benefit the local economy. There will be minimal strain on available housing.

This project will not have any significant adverse effect on existing public services and facilities. Any effect that does occur will be beneficial as the new highway will provide a more efficient route for school buses, mail carriers, ambulances, and any other emergency or public service vehicles which serve the area. Arrangements will be made by the Department of Highways to have all conflicting public utilities moved prior to the start of construction on the project. Although there may be some short-term disruptions in service, all necessary utilities will be perpetuated.

B. Land Use Impacts

As shown on the attached city map, the land at both ends of the project is within the Whitefish city limits, while the land in the center belongs to the Burlington Northern Railroad. The new right-of-way required for the proposed construction includes 3.5 acres of railroad land. Some realignment of railroad tracks will be necessary to accommodate the bridge bents. This will be coordinated with the BN Railroad so there will be no adverse affect on its operations.

Other land use within the immediate area of this project is mostly residential and commercial. The main impact will be the conversion of part of Block 10 from residential uses to transportation use. The two businesses on the north end of the project (O'Piccolo's Pizza and Wilson's Chiropractic Clinic) will be preserved by the proposed alignment. They will suffer some loss of parking but would retain access to the road. It is possible that some parking space can be replaced by excess existing highway right-of-way from the obliteration of the old road(s).

C. Prime and Unique Farmlands

The new right-of-way required for this project is either commercial or residential land from within the urban limits of Whitefish or land from the Burlington Northern Railroad yard. The Soil Conservation Map of Important Farmlands was reviewed and no farmland that is prime, unique, or of statewide or local importance will be impacted by this project.

D. Floodplain Impacts

The project does not encroach on any active stream and is located above the delineated floodplain of the Whitefish River. No floodplain permits or Section 404 permits will be required.

E. Water Quality Impacts

Construction of this project will make only minor changes in the surface drainage patterns. A very minor increase in the volume of runoff due to the increase in road width can be expected. Adherence to standard specifications will assure that these impacts are minimized. A minor temporary increase in water pollution is expected during the actual construction process. The contractor will be required to exercise every reasonable precaution throughout construction to prevent pollution of all waters located in the project vicinity. The contractor will also be required to meet the requirements of all local, state or federal regulations for the prevention or abatement of water pollution. Soil erosion and sedimentation during construction will be kept to a minimum through the use of temporary and permanent erosion control measures. All areas disturbed by construction activities will be reseeded following construction. There should be no long-term effects on water quality resulting from the project.

F. Air Quality Impacts

A temporary increase in air pollution due to dust and fumes is expected as a result of construction operations. The contractor will be required to adhere to all federal, state and local regulations to minimize this pollution.

Air quality impacts after construction will consist mainly of exhaust emissions from motor vehicles. Exhaust emissions will increase on this route as traffic volumes increase. Traffic volumes will increase regardless of the new construction. The improved traffic flow provided by this project will tend to offset the potential increase in exhaust emissions.

The project is not in conflict with the State's implementation plan for achieving National Ambient Air Quality Standards.

G. Historical and Archaeological Impacts

No locations of historical significance have been identified at this time. A cultural resource inventory is presently being conducted on this project by the Department of Highways. If any cultural resources are identified, mitigation will proceed in accordance with Section 106 of the National Historic Preservation Act. The project will be cleared with the State Historic Preservation Office before construction.

H. Section 4(f) and 6(f) Properties

There are no Section 6(f) properties on this project. No wildlife or waterfowl refuge, public park or recreation area will be adversely affected by this project. If the cultural resource inventory identifies any historic sites eligible for placement on the National Register of Historic Places avoidance and mitigation alternatives will be considered and a Section 4(f) Statement will be completed in accordance with Section 4(f) of the Transportation Act.

I. Wetlands

There are no wetlands located within the limits of this project.

J. Biological Impacts

Since this project is located within a developed urban area, any impact to fish, wildlife or native vegetation will be insignificant. The predominate wildlife in the area are those types of small animals and birds typically found in developed areas. No threatened or endangered species will be affected. Some clearing of vegetation may be necessary along the new alignment, but the impact will be minimal. The disturbed areas will be replanted.

K. Noise Impacts

Ambient noise levels were recorded at five locations along the proposed alignment. These locations were selected as being representative of all possible critical locations in noise sensitive areas within the limits of the project. These noise levels were used to project peak hour noise levels using the L_{10} method and the Design Year 2004. (The noise studies for the final alternates of this project are attached. Note that the final Edgewood connection is a combination of the noise studies' East Alternate and Alternate #3.)

The maximum projected noise levels were 71 dBA for commercial areas (at the Railway - Baker intersection) and 69 dBA for residential properties. These levels are lower than the critical design hour noise levels of 75 dBA for commercial and 70 dBA for residential areas. Traffic noise should, therefore, not be a problem on this project.

L. Irreversible and Irretrievable Commitments of Resources

No resources other than money, labor and road building materials will be irretrievably committed to this project. The land that will be required for right-of-way will not be available for other use unless a demand greater than the roadway requires a land use change.

There does not appear to be any major irreversible commitment of resources that would significantly affect the environment in the area of the project. Therefore, the use of money, labor and materials is considered to be justified as it will provide a much needed highway facility to serve the traveling public.

V. Comments and Coordination

There is considerable correspondence on file with the Department of Highways documenting our coordination with other federal, state and local officials. This correspondence is available for review at the Helena office.

A Location and Design Public Hearing will be held on the project to solicit comments from the public. If appropriate, following receipt of these comments, the Department of Highways will prepare a separate documents recommending a "Finding of No Significant Impact" (FONSI) for the project. This will incorporate this Environmental Assessment and any other appropriate environmental information.

FWB:cm:5/C

MONTANA DEPARTMENT OF HIGHWAYS
Helena, Montana 59620

MEMORANDUM:

TO: K. F. Skoog, P.E., Supervisor - Location & Road Design Section

FROM: G. A. Jackson, P.E., Manager - Traffic Unit

RE: Noise Study - RS 487-1(2)0
B.N. Overpass - Whitefish

DATE: October 28, 1985

On October 17, 1985, ambient noise levels were recorded at five locations on the subject project. These noise levels were used to project peak hour noise levels for the Design Year 2004 at each of the locations. The recording stations were selected to be representative of all possible critical locations in noise sensitive areas within the limits of the project (West Alternate).

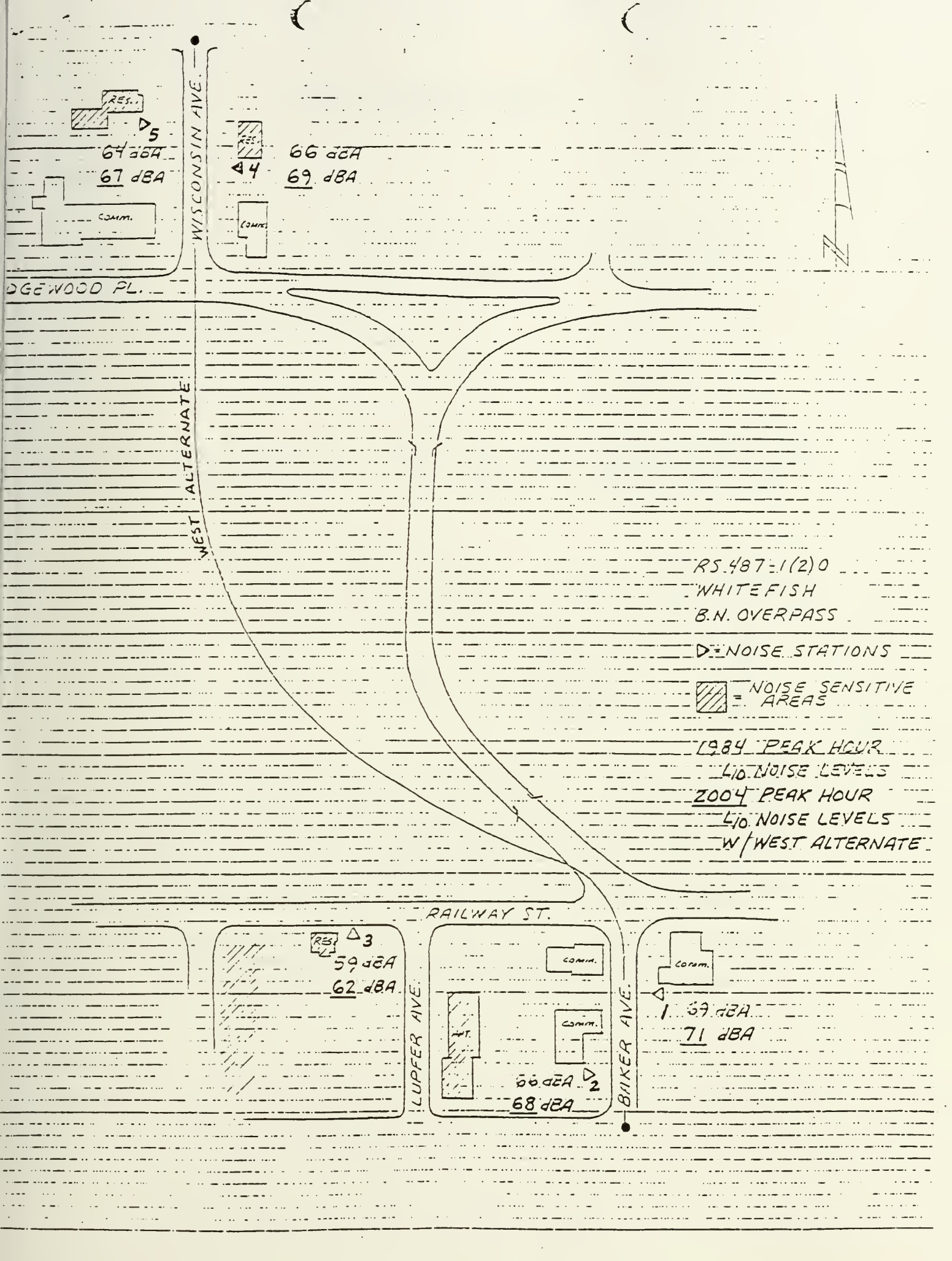
The locations and results of our readings and projections are shown on the attached plan sketch and as follows:

Loc.	Sta.	Dist. from Proposed Centerline (W. Alt.)	Type of Structure	1984 Peak Hour L_{10} Noise Level Existing Centerline	2004 Peak Hour L_{10} Noise Level W/Project (W. Alt.)
1	2+00 Rt.	45'	Commercial	69 dBA	71 dBA
2	0+90 Lt.	65'	Commercial	66 dBA	68 dBA
3	6+80 Lt.	280'	Residential	59 dBA	62 dBA
4	18+20 Rt.	60'	Residential	66 dBA	69 dBA
5	19+00 Lt.	57'	Residential	64 dBA	67 dBA

The maximum critical Design Hour Noise Levels are L_{10} = 70 dBA for residential and L_{10} = 75 dBA for commercial. At each of the test locations, the projected peak hour noise levels for the Design Year 2004 are below critical levels. Traffic noise should not be a problem.

GAJ:GJS:mb:ls

w/attach.


WISCONSIN AVE.
OGEWOOD PL.
WEST ALTERNATE
RAILWAY ST.
LUPFER AVE.
BAKER AVE.
RES.
COMM.
IND.
5
64 dBA
67 dBA
4
66 dBA
69 dBA
3
59 dBA
62 dBA
2
66 dBA
68 dBA
1
69 dBA
71 dBA
RS 487-1(2)0
WHITEFISH
B.N. OVERPASS
▷ = NOISE STATIONS
= NOISE SENSITIVE AREAS
1984 PEAK HOUR
L10 NOISE LEVELS
2004 PEAK HOUR
L10 NOISE LEVELS
W/WEST ALTERNATE

MONTANA DEPARTMENT OF HIGHWAYS
Helena, Montana 59620

MEMORANDUM:

TO: K. F. Skoog, P.E., Supervisor - Location & Road Design Section

FROM: G. A. Jackson, P.E., Manager - Traffic Unit

RE: RS 487-1(2)0 Whitefish
East Alternate - Noise Study

DATE: October 30, 1985

The attached plan sketch of the Whitefish - B.N. Overpass East Alternate shows noise sensitive areas and Design Year 2004 peak hour L_{10} noise levels for representative locations closest to the proposed East Alternate centerlines. The following are projected L_{10} noise levels:

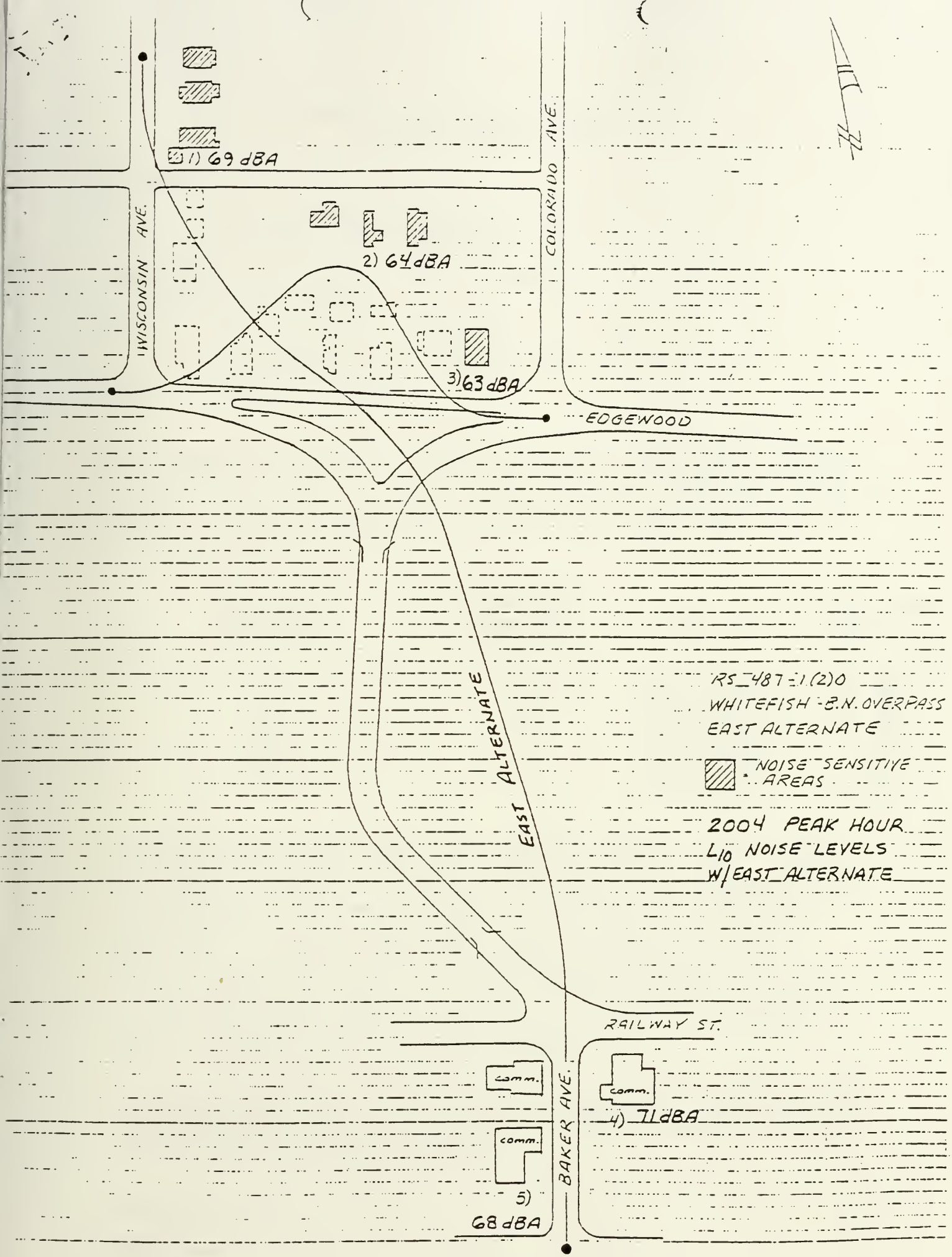
Loc.	Sta.	Dist. from Proposed Centerline (E. Alt.)	Dist. from Centerline Prop. Edgewood Conn. (E. Alt.)	Type of Structure	2004 Peak Hour L_{10} Noise Level (W. Alt.)
1	19+10 Rt.	45'	-	Residential	69 dBA
2	15+80 Rt.	200'	55'	Residential	64 dBA
3	13+00 Rt.	195'	75'	Residential	63 dBA
4	2+00 Rt.	45'	-	Commercial	71 dBA
5	0+90 Lt.	65'	-	Commercial	68 dBA

The greatest impact from traffic noise will be between Wisconsin and Colorado Avenues on the N.E. Edgewood connection (Loc. 2 & 3). Although projected peak hour levels at these locations will not exceed critical design hour maximum levels, proximity of the proposed alignment to remaining structures in this area will raise perceived noise levels 6-8 dBA above present levels. Projected Year 2004 noise levels at the north and south ends of the project (Loc. 1, 4 & 5) will be nearly identical for either the east or west alternate.

The maximum critical Design Hour Noise Levels are L_{10} = 70 dBA for residential and L_{10} = 75 dBA for commercial. Projected peak hour noise levels for the Year 2004 should not exceed critical levels at the locations indicated.

GAJ:GJS:mb:3f

Attachment


1) 69 dBA
2) 64 dBA
3) 63 dBA
WISCONSIN AVE.
COLORADO AVE.
EDGEWOOD
EAST ALTERNATE
RAILWAY ST.
BAKER AVE.
comm.
comm.
comm.
4) 71 dBA
5) 68 dBA
RS-487-1(2)0
WHITEFISH - B.N. OVERPASS
EAST ALTERNATE
NOISE SENSITIVE AREAS
2004 PEAK HOUR
L_{10} NOISE LEVELS
W/ EAST ALTERNATE

MONTANA DEPARTMENT OF HIGHWAYS
Helena, Montana 59620

MEMORANDUM

TO: K. F. Skoog, P.E., Supervisor
Location & Road Design

FROM: G. A. Jackson, P.E., Manager
Traffic Unit

RE: RS 487-1(2)0 - Whitefish
Alternate No. 3 - Noise Study

DATE: March 11, 1986

The attached plan sketch of the Whitefish - Burlington Northern Overpass Alternate No. 3 shows noise sensitive areas and Design Year 2004 peak hour L_{10} noise levels for representative locations closest to the Alternate No. 3 centerlines. The following are project L_{10} noise levels:

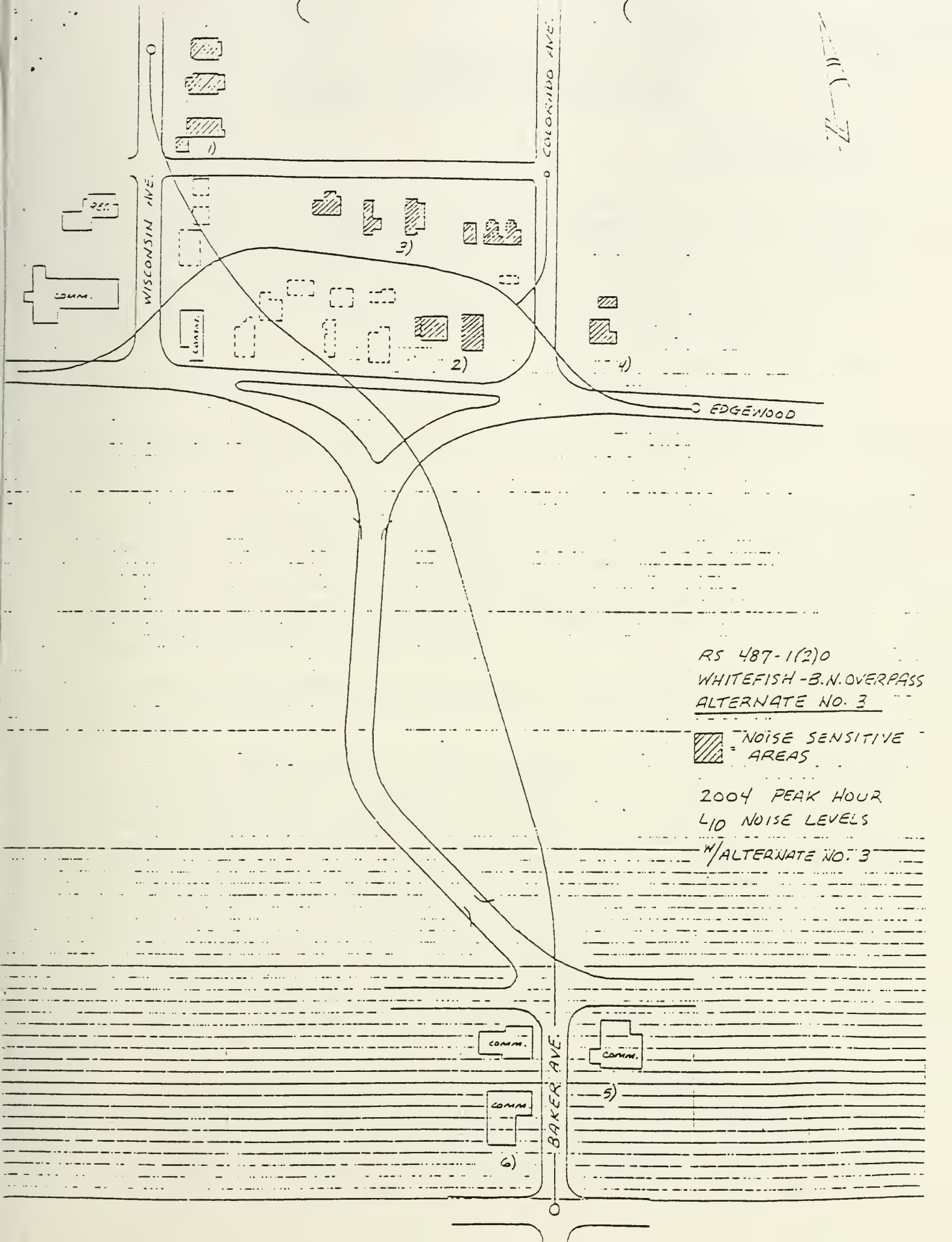
Loc.	Dist. From Proposed Centerline	Dist. From Centerline Edgewood Connection	Type of Structure	2004 Peak Hours L_{10} Noise Level
1	45'	-	Residential	69 dBA
2	130'	90'	Residential	68 dBA
3	310'	75'	Residential	64 dBA
4	355'	55'	Residential	62 dBA
5	45'	-	Commercial	71 dBA
6	65'	-	Commercial	68 dBA

As with the East Alternate, the greatest impact from traffic noise will be between Wisconsin and Colorado Avenues. Location No. 2 will be impacted from the southwest by the proposed main alignment and from the northeast by the Edgewood connection. Locations No. 3 and 4 will also be impacted by the Edgewood connection. Although projected peak hour levels at these locations will not exceed critical design hour maximum levels, as with the East Alternate, the perceived noise levels will be 6-8 dBA higher than present levels. Projected noise levels at the north and south ends of the project (Loc. 1 , & 6) will be nearly identical for all three alternates.

The maximum critical design Hours noise levels are L_{10} = 70 dBA for residential and L_{10} = 75 dBA for commercial. Projected peak hour noise levels for the year 2004 should not exceed critical levels at the locations indicated.

GAJ:GJS:cm:2/q

Attachments



RS 487-1(2)0
WHITEFISH - B.N. OVERPASS
ALTERNATE NO. 3

▨ = NOISE SENSITIVE AREAS

2004 PEAK HOUR
L_{10} NOISE LEVELS
W/ALTERNATE NO. 3

SUMMARY OF
LOCATION AND DESIGN PUBLIC HEARING

RS 487-1(2)
B.N. Overpass-
Whitefish

File # 382

This report is submitted in lieu of a verbatium transcript of the proceedings at a Combined Location and Design Public Hearing held in the Multi-purpose room of the Whitefish High School in Whitefish, Montana on Wednesday, September 10, 1986 at 7:30 P.M. The meeting discussed the proposed location and major design features of a reconstruction project to replace the overpass crossing the Burlington Northern Railroad on Secondary Route 487 in Whitefish, Montana.

The tape of the hearing is on file with the Department of Highway's Public Hearings Unit in Helena, Montana.

The project will consist of a new structure and approaches over the Railroad yard to provide 2-12 foot driving lanes, 2-10 foot shoulders and seperated 6 foot sidewalks on each side.

Larry Brazda, Assistant Construction Supervisor in Kalispell, gave a brief outline of the main features of the proposed alignment. Bob Scherting, Field Right-of-way Supervisor, recapped the process used to purchase the additional right-of-way and John Horton, Relocation Assistance Officer, presented the relocation statement which outlined the benefits and services available to anyone displaced by the project. Dan Bartsch, Public Hearings Manager, summarized the Environmental Assessment prepared on the project.

Forty-eight people attended the hearing and most all speakers implied the existing traffic situation was bad and something had to be done.

Three people brought up other alternate locations which they stated would be "shorter", "better", "cheaper". The first suggestion was two crossings, one an underpass quite a distance west of the existing structure near the railroad river crossing and a second, an overpass some distance east, near the stock yards. As these would require significant route changes and would fall more in the category of business-area by-passes, they seem beyond the scope of this project. The other options brought back basically the Highway Department's earlier preferred option. This new structure would be west of the existing crossing, then keep Edgewood essentially straight or even shaded toward the railroad and build the east and west Edgewood approaches up to the new north approach for the structure. Discussion from others questioned the grades of these various locations compared to the proposed site and how the traffic movements and intersections would function. The Department will take another look at this to see if it is feasable.

Several questions focused on the loop connections of Edgewood, how they would work, the grade at the intersection and the grade of the loops themselves. Suggestions included, moving the intersection and loops further north to help the main approach grade, use exiting streets instead, improve Iowa to Woodland on the west and Colorado to Woodland on the east. Several feel the new intersection will be a bottleneck unless there are left-turn lanes and various on-off ramps or lanes

to let traffic move to and from Edgewood. The need for a traffic signal was also questioned. Some felt the speed on the proposal would make a crossing movement east-west, more difficult. No one indicated a strong opinion on the movements on and off Railroad Street. One letter supported one-way movement to the west.

Detail design items supported street lighting along the project and walk-bike lanes from the sidewalks on the north end of the structure to connect to the remainders of the existing Edgewood "ramps". Other details discussed, included the landscape plan and the barrier between traffic and the sidewalks on the structure. Private approaches and use of the one-half block, deadended piece of Wisconsin were also questioned.

The meeting closed at 9:20 P.M.

Daniel P. Bartsch, Manager
Public HEarings Unit
September 30, 1986

LOCATION AND DESIGN PUBLIC HEARING

A Location and Design Public Hearing was held on September 10, 1986 at the Whitefish High School in Whitefish to discuss the proposed location and major design features of the project and to solicit further comments from the public. Forty-eight people attended the hearing. An engineering presentation showing the proposed alignment and identifying the major design features and an outline of the right-of-way acquisition system were given. The relocation statement outlining the benefits and services available to anyone displaced by the project was also presented and the Environmental Assessment was summarized. The meeting was then opened for public comments and discussion.

A major subject of discussion was the matter of alignment alternates. Several people wanted to know how many alternates had been considered and how the preferred alternate had been selected. A brief history was given of the development of the project and the various alternates that had been considered at one time or another. The considerations leading to the selection of the proposed alignment were explained.

General suggestions included moving the intersection and loops further north to help the main approach grade and either improving Iowa to Woodland on the west and Colorado to Woodland on the east, or using other existing streets, instead of rebuilding Edgewood. Any of these proposals would require the rebuilding of one or more streets to handle the changed traffic flows and would result in increased impacts on the community.

Two specific location alternates were brought up by speakers. The first suggested alternate brought back the Highway Department's earlier West Alternate (Alternate A on Autoscreen Print #2). The feasibility of this alternate was reconsidered by the Department. Moving the alignment to the west of the existing structure would result in a higher bridge due to railroad safety considerations. This would have resulted in even steeper approach grades (8% +) than presently exist, higher fills and connections with Edgewood Place on steep grades, which would pose a significant safety problem during icy winter conditions. There is a major traffic split at Edgewood intersection and the heavy traffic volumes projected may warrant signalization in the near future. MDOH does not consider this alternate to provide an adequate intersection from a safety standpoint.

The second suggested location alternate included two crossings, one an underpass about a half mile west of the existing structure near the railroad river crossing and a second, an overpass some distance east, near the stockyards. As these would require significant route changes and would fall more in the category of business-area by-passes, they are considered outside the scope of this project.

Other discussion questioned the grades of these various locations compared to the proposed site and how the traffic movements and intersections would function. Several questions focused on the loop connections of Edgewood, how they would work, the grades at the intersection and the grade of the loops themselves. Several feel the new intersection will be a bottleneck unless there are left-turn lanes and various on-off ramps or lanes to let traffic move to and from Edgewood. Some felt the speed on the proposal would make a crossing

movement east-west more difficult. A left-turn bay for northbound traffic is presently planned at Edgewood Intersection. Other traffic control features will be considered during future design.

There were many questions on specific design areas of the proposed project. Various people asked whether the project would provide a new modern bridge design and if it would include landscaping, a walkway on each side and barrier rails. It was explained that all of these items would be included under the proposed project. There were also a number of requests for design features not presently included in the preliminary design. These included a traffic signal at the Edgewood intersection, a lighting system on the bridge and extension of planned sidewalks. Two people expressed concerns that school children might not walk around the Edgewood connection and requested that the present north approach fill be left in place to facilitate a shorter walk to school. These items will be considered for possible incorporation into the project during design stage.

The preliminary plans were discussed with those people who were concerned about specific impacts, which included two persons whose properties were directly impacted. Their major concerns were when the impact would take place, the extent of compensation and relocation assistance, and what they should do in the meantime. They were told that the exact impacts would be determined when the final design was done and that a right-of-way agent would contact them at that time.

All the speakers agreed that the existing traffic situation was not acceptable and needed to be corrected. There did not appear to be any major objection to the proposed alignment - one speaker came up with most of the location alternates mentioned above. The people attending were requested to send any other comments they might have to the MDOH Public Hearings Unit. No negative letters were received.

The City Council of Whitefish also conducted an informal public hearing on September 22, 1986. The majority of the people present at that meeting supported the proposed alignment. The letter from the city also recommended implementation of many of the design features suggested at the Location and Design Public Hearing. As noted above, these features will be considered during the design stage of the project. The Flathead County Commissioners are also in support of the hearing proposal.

A copy of all correspondence received since the public hearing is attached.

After careful consideration of all comments received, the Montana Department of Highways believes that the proposed location and design will provide a facility necessary to the community and capable of accommodating the existing and projected traffic volumes while minimizing impacts to the community.

FWB:3:mb:cm:242/Q

Date Recd. Preconst.				
Act	Info	MAIL ROUTE	Attach	Initial
	✓	30		
	✓	30 Eng. Specialties		
		31 Contract Plans		
	✓	32 Loc. Road Design		
		33 Environment		
		34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
✓		37 Pub. Hearing		
		38 Photogrammetry		
		39 Consultant Design		
	✓	Preconstruct,		
	✓	Kalispell Asst Engr.		
		"		
		File		

September 13, 1986

Department of Highways
Public Hearings Unit
2701 Prospect Avenue
Helena, Montana 59601

To Whom it may concern:

I attended the meeting held at the Whitefish High School on September 11, 1986, regarding the proposed overpass. I have been employed by the Whitefish Police Department for the last twelve years, and presently hold the rank of sergeant.

The proposal presented that night appears to give safer intersections on both ends of the overpass and provides for faster and smoother flow of traffic through Whitefish.

I would have to agree with Mrs. Laird; that something should be done for easier access for pedestrians on the north side. That is the only public route supplied for that immediate area. There is a large amount of foot traffic in the morning and afternoon by children going to and from school. In the late evenings and early morning hours, quite a few people that have been imbibing (mostly tourists) walk to their rented or leased homes.

Two more points that should be considered are:

1. At the intersection of Edgewood and Wisconsin, a left turn lane for both north and south-bound traffic.
2. Also, Railway Street, by Kentucky Fried Chicken, should be made into a one-way westbound street, because of the uphill grade for eastbound traffic to a stop sign.

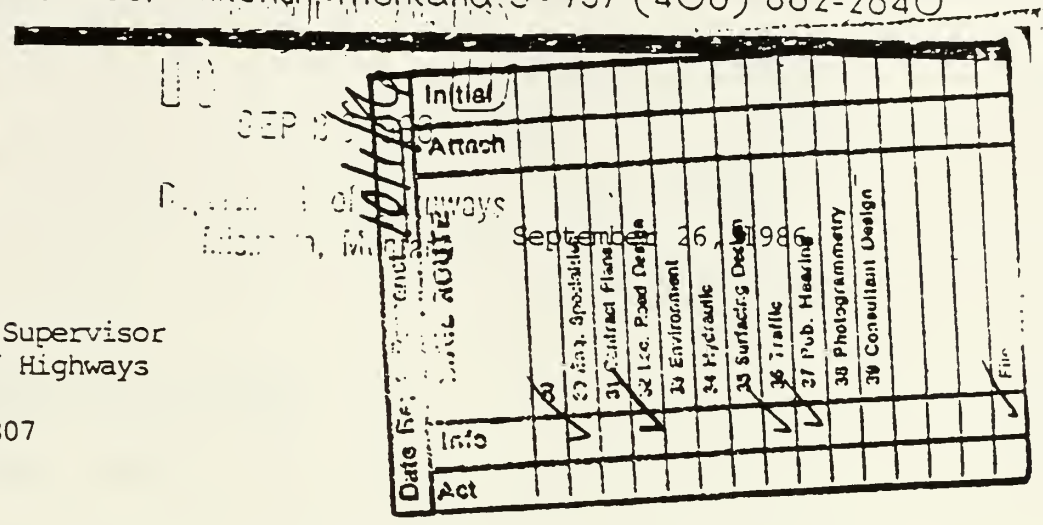
Thank you for your attention to these matters.

Sgt Joe Van Ham

Sgt. Joe Van Ham
Whitefish Police Department

L.O.W, Williams 9-23-86

City of Whitefish
Box 158, Whitefish, Montana 59937 (406) 862-2640



September 26, 1986

Mr. Bob LaJoie
Engineering Services Supervisor
Montana Department of Highways
P. O. Box 7039
Missoula, Montana 59807

Dear Bob:

The City Council of the City of Whitefish conducted an informal public hearing on the proposed viaduct at its last meeting on September 22. The majority of the people present at the meeting supported the preferred location of the proposed viaduct which would be east of the existing viaduct.

The City Council also recommends that the following be implemented into your design:

1. Some type of walkway up the existing embankment so that the public does not have to walk away from downtown to get to it;

2. Lighting on the viaduct to encourage pedestrian and bike traffic;

3. Seeding of the embankment to prevent erosion and to beautify it;

4. The enclosure of the walkways on the viaduct to increase the safety for those who utilize these walkways. It was felt that a concrete divider was not ample enough to protect those who use the walkways;

5. Some type of lighting for pedestrians leading up to the main portion of the viaduct; and

6. The installation of conduit under the roadway surface to facilitate the installation of a traffic signal when the traffic counts warrant a signal.

I look forward to working with you and your staff on this project. I hope that we will have an opportunity to comment on the project as the engineering progresses. Please feel free to contact me if you have any questions about these comments.

Sincerely yours,

Ralph Freedman

Ralph Freedman
City Manager

RF/kb

Flathead County
Board of Commissioners

800 SOUTH MAIN STREET • KALISPELL, MONTANA 59901 • (406) 755-5300

October 10, 1986

RECEIVED
OCT 14 1986
Department of Highways
Missoula, Montana

Mr. Bob LaJoy
Montana Department of Highways
P. O. Box 7039
Missoula, Montana 59807

Dear Sir:

Please be advised that I have discussed the matter of the proposed overpass realignment at Whitefish, Montana with the Board of County Commissioners.

The Commissioners have expressed their concurrance with the overpass realignment as presented as the final proposal at the meeting which was held in Whitefish. They believe this to be a proper and acceptable project and support your efforts in bringing this project to a successful conclusion.

Very truly yours,
OFFICE OF FLATHEAD COUNTY
BOARD OF COMMISSIONERS

Earl W. Bennett

Earl W. Bennett
Administrative Assistant

MONTANA DEPARTMENT OF HIGHWAYS
Helena, Montana 59620

MEMORANDUM:

TO: K. F. Skoog, P.E., Supervisor - Location & Road Design Section

FROM: G. A. Jackson, P.E., Manager - Traffic Unit

RE: Noise Study - RS 487-1(2)0
B.N. Overpass - Whitefish

DATE: October 28, 1985

On October 17, 1985, ambient noise levels were recorded at five locations on the subject project. These noise levels were used to project peak hour noise levels for the Design Year 2004 at each of the locations. The recording stations were selected to be representative of all possible critical locations in noise sensitive areas within the limits of the project (West Alternate).

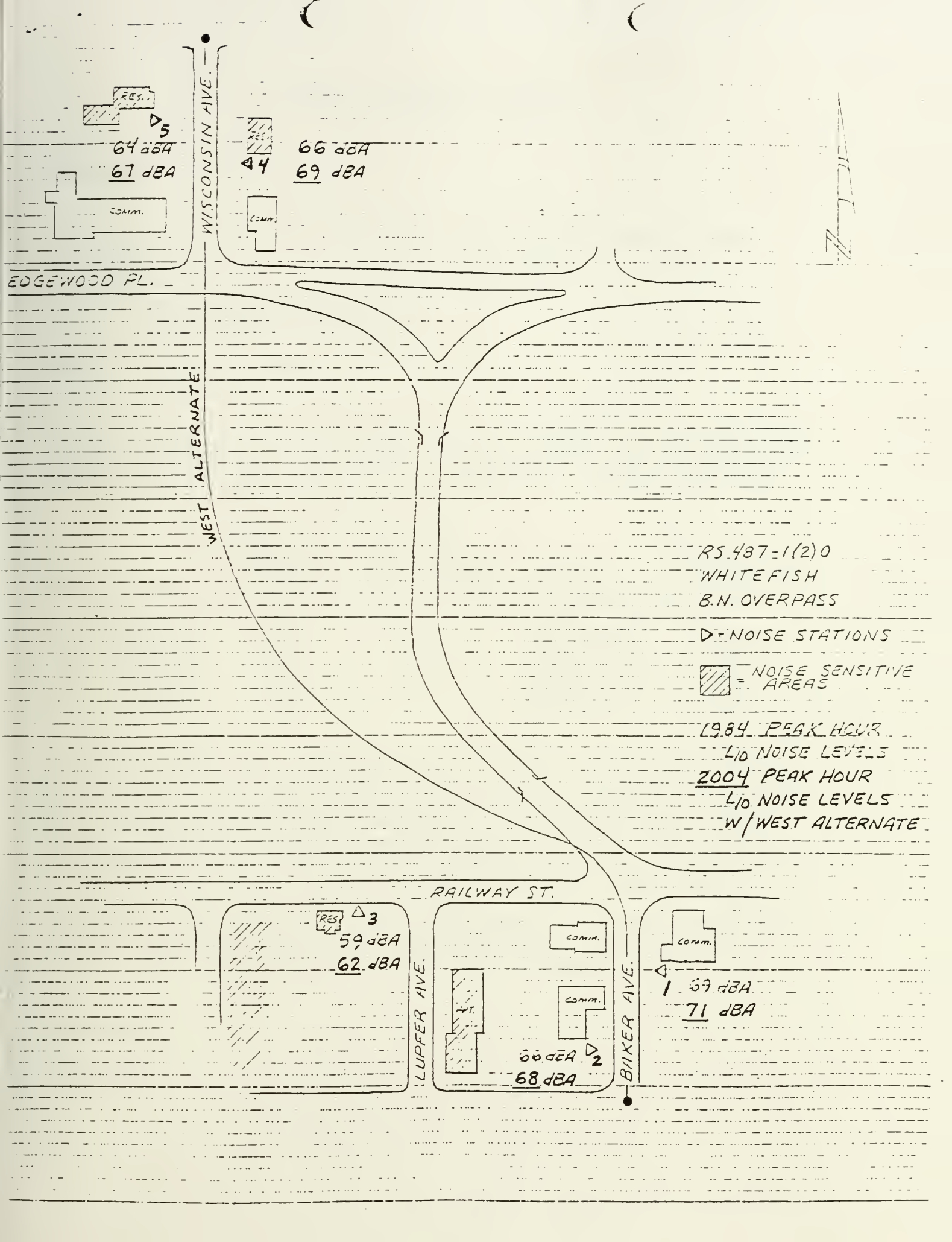
The locations and results of our readings and projections are shown on the attached plan sketch and as follows:

Loc.	Sta.	Dist. from Proposed Centerline (W. Alt.)	Type of Structure	1984 Peak Hour L_{10} Noise Level Existing Centerline	2004 Peak Hour L_{10} Noise Level W/Project (W. Alt.)
1	2+00 Rt.	45'	Commercial	69 dBA	71 dBA
2	0+90 Lt.	65'	Commercial	66 dBA	68 dBA
3	6+80 Lt.	280'	Residential	59 dBA	62 dBA
4	18+20 Rt.	60'	Residential	66 dBA	69 dBA
5	19+00 Lt.	57'	Residential	64 dBA	67 dBA

The maximum critical Design Hour Noise Levels are L_{10} = 70 dBA for residential and L_{10} = 75 dBA for commercial. At each of the test locations, the projected peak hour noise levels for the Design Year 2004 are below critical levels. Traffic noise should not be a problem.

GAJ:GJS:mb:ls

w/attach.


WISCONSIN AVE.
EDGEWOOD PL.
WEST ALTERNATE
RAILWAY ST.
LUPFER AVE.
BIKER AVE.
RES.
COMM.
5
64 dBA
67 dBA
4
66 dBA
69 dBA
3
59 dBA
62 dBA
2
66 dBA
68 dBA
1
69 dBA
71 dBA
RS 487-1(2)0
WHITEFISH
B.N. OVERPASS
▷ = NOISE STATIONS
= NOISE SENSITIVE AREAS
1984 PEAK HOUR
L10 NOISE LEVELS
2004 PEAK HOUR
L10 NOISE LEVELS
W/ WEST ALTERNATE

MONTANA DEPARTMENT OF HIGHWAYS
Helena, Montana 59620

MEMORANDUM:

TO: K. F. Skoog, P.E., Supervisor - Location & Road Design Section

FROM: G. A. Jackson, P.E., Manager - Traffic Unit

RE: RS 487-1(2)0 Whitefish
East Alternate - Noise Study

DATE: October 30, 1985

The attached plan sketch of the Whitefish - B.N. Overpass East Alternate shows noise sensitive areas and Design Year 2004 peak hour L_{10} noise levels for representative locations closest to the proposed East Alternate centerlines. The following are projected L_{10} noise levels:

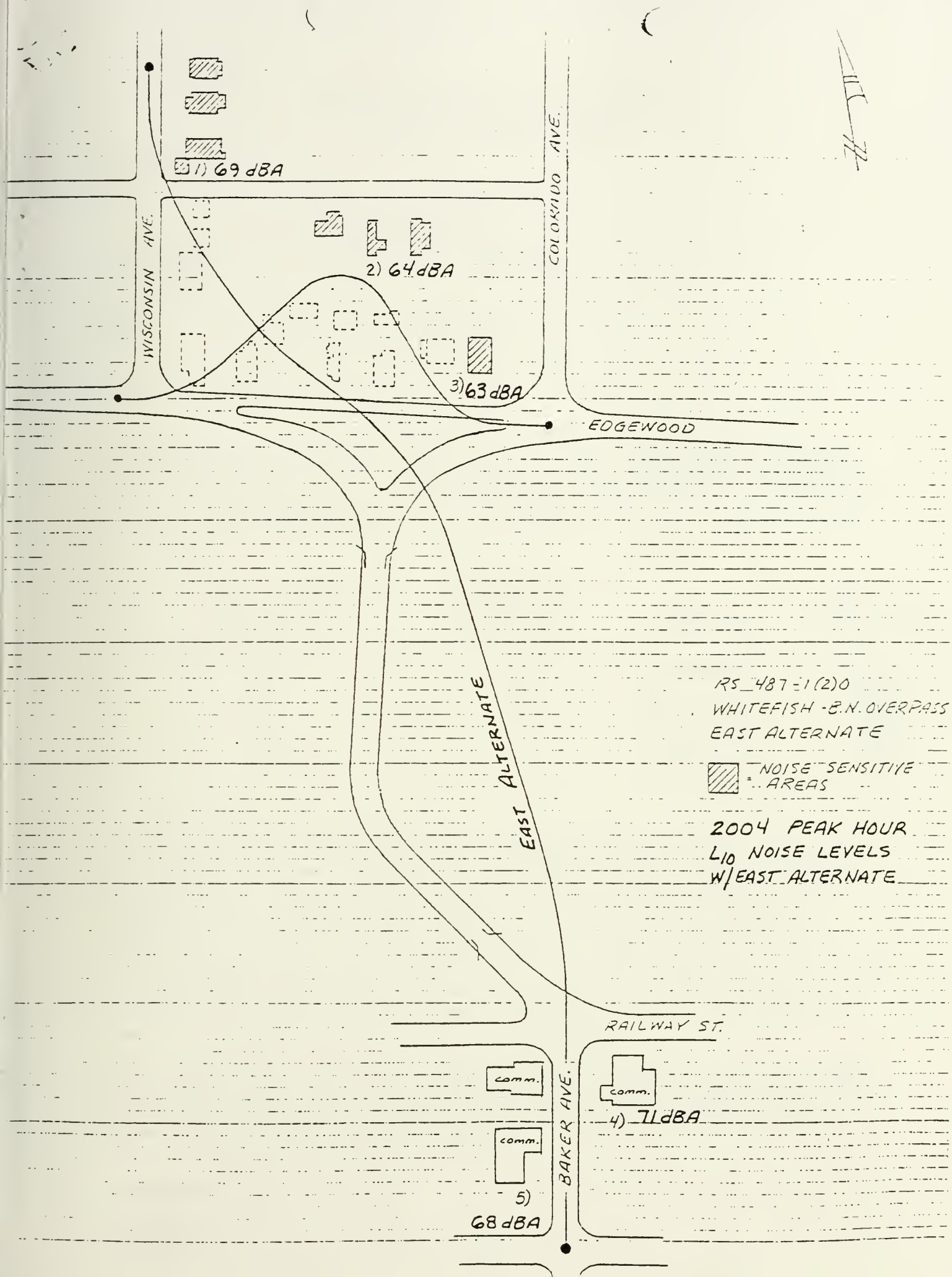
Loc.	Sta.	Dist. from Proposed Centerline (E. Alt.)	Dist. from Centerline Prop. Edgewood Conn. (E. Alt.)	Type of Structure	2004 Peak Hour L_{10} Noise Level (E. Alt.)
1	19+10 Rt.	45'	-	Residential	69 dBA
2	15+80 Rt.	200'	55'	Residential	64 dBA
3	13+00 Rt.	195'	75'	Residential	63 dBA
4	2+00 Rt.	45'	-	Commercial	71 dBA
5	0+90 Lt.	65'	-	Commercial	68 dBA

The greatest impact from traffic noise will be between Wisconsin and Colorado Avenues on the N.E. Edgewood connection (Loc. 2 & 3). Although projected peak hour levels at these locations will not exceed critical design hour maximum levels, proximity of the proposed alignment to remaining structures in this area will raise perceived noise levels 6-8 dBA above present levels. Projected Year 2004 noise levels at the north and south ends of the project (Loc. 1, 4 & 5) will be nearly identical for either the east or west alternate.

The maximum critical Design Hour Noise Levels are L_{10} = 70 dBA for residential and L_{10} = 75 dBA for commercial. Projected peak hour noise levels for the Year 2004 should not exceed critical levels at the locations indicated.

GAJ:GJS:mb:3f

Attachment


1) 69 dBA
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3) 63 dBA
WISCONSIN AVE.
COLORADO AVE.
EDGEWOOD
EAST ALTERNATE
RAILWAY ST.
BAKER AVE.
comm.
comm.
comm.
4) 71 dBA
5)
68 dBA
RS_487-1(2)0
WHITEFISH - B.N. OVERPASS
EAST ALTERNATE
= NOISE SENSITIVE AREAS
2004 PEAK HOUR
L_{10} NOISE LEVELS
W/ EAST ALTERNATE

MONTANA DEPARTMENT OF HIGHWAYS
Helena, Montana 59620

MEMORANDUM

TO: K. F. Skoog, P.E., Supervisor
Location & Road Design

FROM: G. A. Jackson, P.E., Manager
Traffic Unit

RE: RS 487-1(2)0 - Whitefish
Alternate No. 3 - Noise Study

DATE: March 11, 1986

The attached plan sketch of the Whitefish - Burlington Northern Overpass Alternate No. 3 shows noise sensitive areas and Design Year 2004 peak hour L_{10} noise levels for representative locations closest to the Alternate No. 3 centerlines. The following are project L_{10} noise levels:

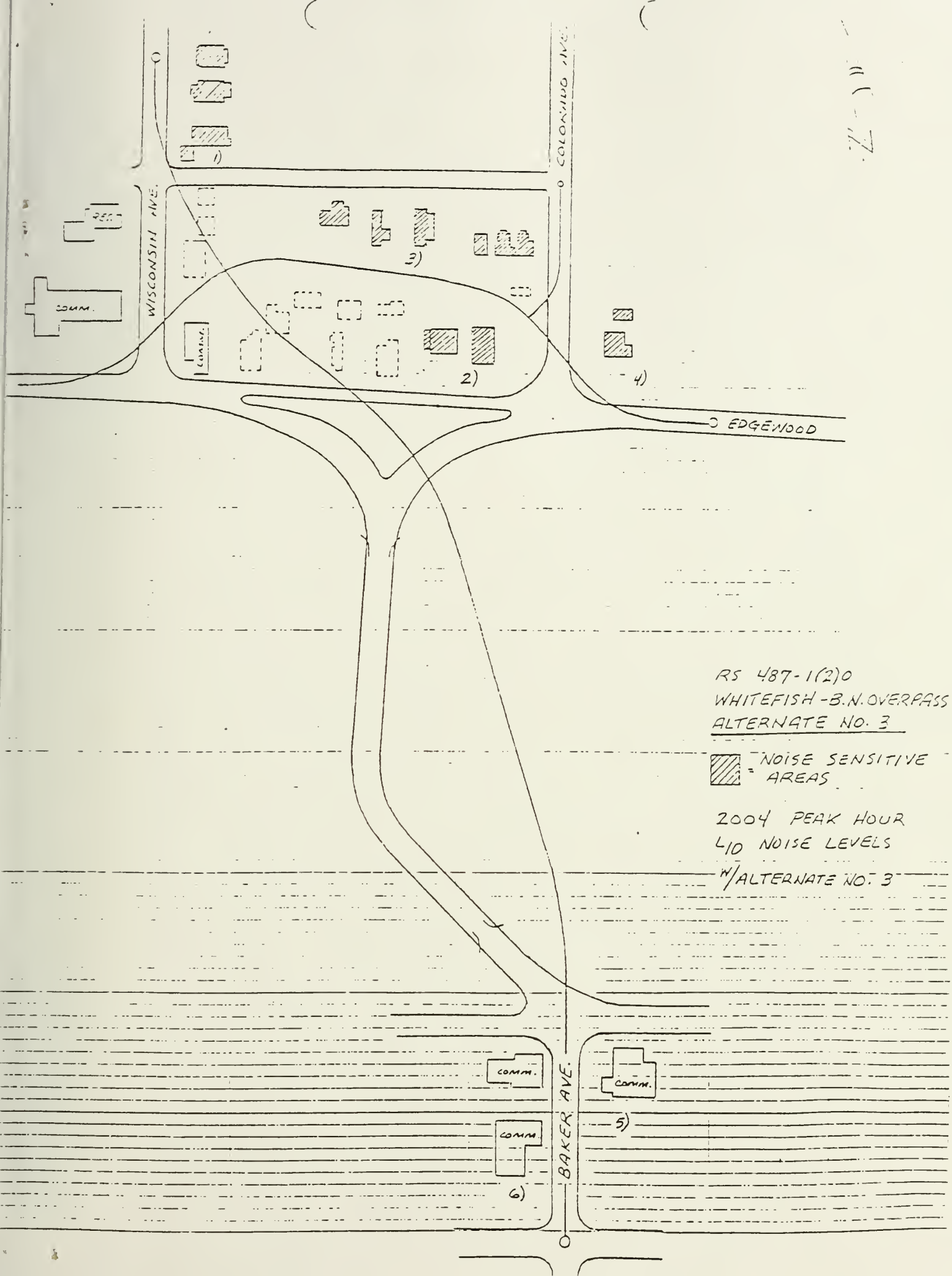
Loc.	Dist. From Proposed Centerline	Dist. From Centerline Edgewood Connection	Type of Structure	2004 Peak Hours L_{10} Noise Level
1	45'	-	Residential	69 dBA
2	130'	90'	Residential	68 dBA
3	310'	75'	Residential	64 dBA
4	355'	55'	Residential	62 dBA
5	45'	-	Commercial	71 dBA
6	65'	-	Commercial	68 dBA

As with the East Alternate, the greatest impact from traffic noise will be between Wisconsin and Colorado Avenues. Location No. 2 will be impacted from the southwest by the proposed main alignment and from the northeast by the Edgewood connection. Locations No. 3 and 4 will also be impacted by the Edgewood connection. Although projected peak hour levels at these locations will not exceed critical design hour maximum levels, as with the East Alternate, the perceived noise levels will be 6-8 dBA higher than present levels. Projected noise levels at the north and south ends of the project (Loc. 1 , & 6) will be nearly identical for all three alternates.

The maximum critical design Hours noise levels are L_{10} = 70 dBA for residential and L_{10} = 75 dBA for commercial. Projected peak hour noise levels for the year 2004 should not exceed critical levels at the locations indicated.

GAJ:GJS:cm:2/q

Attachments


COLONIAL AVE.
WISCONSIN AVE.
COMM.
1)
2)
3)
4)
5)
6)
EDGEWOOD
BAKER AVE.
RS 487-1(2)0
WHITEFISH - B.N. OVERPASS
ALTERNATE NO. 3
= NOISE SENSITIVE AREAS
2004 PEAK HOUR
L10 NOISE LEVELS
W/ALTERNATE NO. 3

STATE	PROJECT NUMBER	SHEET NO.
MONTANA		

STATE DOCUMENTS COLLECTION
JAN 19 1993
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620
PLEASE RETURN

PROPOSED CENTERLINE ——————

APPROXIMATE CONSTRUCTION LIMITS — — — — —

RS 487 - 1(2)0
BN OVERPASS - WHITEFISH
FLATHEAD COUNTY
SCALE 1"= 200'±

AUTOSCREEN PRINT # 1

DESIGNED		
DRAWN		
CHECKED		
REVISED		
REVISED		
REVISED		

RS 487 (2)0 BN OVERPASS (WHITEFISH) 1"=200' Control No 0732

S 328.13
F76rs
1992
Map

STATE	PROJECT NUMBER	SHEET NO.
MONTANA		

ALTERNATE A

BAKER to WISCONSIN

WEST ALTERNATE

ALTERNATE B

LUPFER to WISCONSIN

ALTERNATE E

BAKER to COLORADO

ALTERNATE F

CENTRAL to COLORADO

DESIGNED		
DRAWN		
CHECKED		
REVISED		
REVISED		
REVISED		

APPROXIMATE CENTERLINES ————————

APPROXIMATE CONSTRUCTION LIMITS — — — — —

RS 487-1 (2) 0

BN OVERPASS-WHITEFISH

PREVIOUS OVERPASS ALIGNMENTS

AUTOSCREEN PRINT #2